WESTMORLAND COUNTY COUNCIL

ANNUAL REPORT

OF THE

COUNTY MEDICAL OFFICER OF HEALTH

THE YEAR 1954

Westmorland Gazette Ltd., Kendal

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COUNTY OF WESTMORLAND.

Public Health Department,

County Hall, Kendal.

October, 19[illegible]

Mr. Chairman, Ladies and Gentlemen,

I have the honour to present my Annual Report for 1954.

VITAL STATISTICS

There is little change to report in the Vital Statistics from th previous year. The Death Rate for the County is 10.61 as agains the Death Rate for England and Wales of 11.3. The Infant Mortality Rate this year shows a decided improvement, 19.70 as compared with 25.5 for England and Wales. I have no doubt that this figure does not represent a progressive improvement, but that there will be considerable fluctuation from causes outside our control. The Birth Rate shows a slow but progressive decline at 13.7 as against 15.2 for England and Wales. The chief causes of death remain as before, with heart disease, cerebral haemorrhage and cancer leading in that order. Heart Disease seems to be responsible for nearly twice as many deaths as cancer and cerebral haemorrhage put together, and by far exceeding all other causes of death due to disease. Deaths due to Tuberculosis of the respiratory system have now shrunk to insignificance. (See Page 41: Tuberculosis.)

NOTIFIABLE INFECTIOUS DISEASES

This calls for little comment as the pattern is much the same as in previous years. There has been no Diphtheria. Measles cases were only approximately half those of the previous years. There were 7 cases of acute poliomyelitis, not including 1 paralytic case. The only case of death due to Infectious Disease was one from whooping cough.

AMBULANCE SERVICE.

For the first time since the start of this service there has been a decline and the Sitting Case Cars ran 246,400 miles against 275,808 miles last year. The Ambulances ran a total of 81,000 miles against 78,000 for 1953. By mutual arrangement with the Lancashire Ambulance Service a pool of Parrot stretchers is now available and these are undoubtedly very useful when patients have to be carried by rail.

WELFARE FOODS.

The distribution of Welfare Foods was taken over from the Ministry of Food on 28th June, 1954. Although the notice given was very short, nevertheless the staff managed to cope with the situation. A shop was established in the Stramongate School Clinic for the purpose of distributing Welfare Foods and this is working satisfactorily. In the rural areas small depots run by voluntary helpers have been established throughout the county.

NURSING SERVICES.

The progress in housing of the nurses still goes forward. Eight new houses have now been completed and sites for new houses at Temple Sowerby, Appleby, Kendal and Levens have been obtained. There is little doubt that provision of suitable houses for nurses has a material effect in assisting the Council to maintain the supply of nurses. A significant feature is that there are no vacancies in all the nursing districts in Westmorland.

I have the honour to be,

Your obedient Servant,

JOHN A. GUY

County Medical Officer of Health.

PUBLIC HEALTH OFFICERS OF THE AUTHORITY IN 1954.

Name.	Qualifications.	Office.	Whole or Part Time.	Other Offices.
John A. Guy	M.D., D.P.H.	County Medical Officer	Whole	Principal School Medical Officer
F. M. Taylor	M.R.C.S., L.R.C.P., (Lond.)	Asst. County Medical Officer	Whole	School Medical Officer
J. Munro Campbell ..	M.B., Ch. B., D.P.H. ..	Tuberculosis Officer	Part	Physician Superintendent, Meathop Sanatorium
W. Hugh Morton	M.B., Ch.B., M.R.C.P., D.P.H.	Tuberculosis Officer	Part	Consultant Chest Physician
John Irvine	L.D.S.	Senior Dental Officer	Whole	Principal School Dental Officer
A. S. Carter	M.R.C.S., L.R.C.P., L.D.S.	Assist. Dental Officer	Whole	School Dental Officer
A. L. Hutton .. .. (Resigned 28-2-54)	L.D.S.	Assist. Dental Officer	Whole	School Dental Officer
A. Parkin .. .. (Commenced 6-9-54)	B.D.S.	Assist. Dental Officer	Whole	School Dental Officer
P. G. Holloway	.. .. ..	Mental Health Worker	Whole	
E. M. Thomas	S.R.N., S.C.M., H.V.Cert...	Superintendent Nursing Officer	Whole	

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area (in acres, land and inland water)	504,917
Population (Registrar-General's estimate of resident population, mid-1954)	66,900
Total Rateable Value as on 1st April, 1954	£478,697
Estimated product of a Penny Rate (General County) for the financial year 1954-55	£1,906

EXTRACTS FROM VITAL STATISTICS IN THE YEAR 1954.

	Total.	Males.	Females.
Live Births—Legitimate	829	408	421
Illegitimate	34	18	16
Total births ...	863	426	437

Birth Rate per 1,000 of the estimated resident population ... 13.7

Birth Rate, England and Wales, 15.2.

	Total.	Males.	Females.
Stillbirths	17	10	7

Rate per 1,000 total live and stillbirths, 19.32

Stillbirth Rate, England and Wales, 24.0

	Total.	Males.	Females.
Deaths	816	400	416

Death Rate per 1,000 of the estimated resident population, 10.61

Death Rate, England and Wales, 11.3

Death from Pregnancy, Childbirth or Abortions 2

Rate per 1,000 total (live and still) births, for the purpose of calculating Maternal Morality, 2.27.

Maternal Mortality Rate, England and Wales, per 1,000 total (live and still) births, 0.69.

Death Rate of Infants under one year of age :—

All infants per 1,000 live births	19.70
Legitimate infants per 1,000 legitimate live births ...	18.09
Illegitimate infants per 1,000 illegitimate live births ...	58.80

Infant Death Rate, England and Wales, 25.5.

Deaths from :—	1953.	1954.
Cancer (all ages)	119	119
Measles (all ages)	—	—
Whooping Cough (all ages)	—	—

POPULATION.

DISTRICT.	Area in acres (Land and Inland Water).	Population. Registrar General's estimate Mid.-1954.
URBAN.		
Appleby	1,877	1,700
Lakes ...	49,917	5,510
Kendal	3,705	18,490
Windermere ...	9,723	6,490
RURAL.		
North Westmorland	288,688	16,500
South Westmorland	151,007	18,210
Westmorland ...	**504,917**	**66,900**

BIRTH RATE 1953-1954

Birth Rate per 1,000 estimated resident population.

District.	1953.	1954.
Urban.		
Appleby	13.8	12.1
Kendal	12.8	12.8
Lakes	10.0	10.4
Windermere	10.6	10.2
Rural.		
North Westmorland ..	17.7	17.1
South Westmorland ..	18.1	14.2
Westmorland	**14.9**	**13.7**
England & Wales	15.5	15.2

The Birth Rates in the table above are calculated using the comparability factor supplied for the purpose by the Registrar-General.

Live Births registered in the last five years were as follows :—

Year	1950.	1951.	1952.	1953.	1954.
Number of births...	969	898	948	937	863

DEATH RATE, 1952, 1953, and 1954.

Death Rate per 1,000 estimated population.

District.	1952.	1953.	1954.
URBAN			
Appleby	12.7	10.6	11.8
Kendal	11.1	14.3	10.4
Lakes	11.9	8.5	8.7
Windermere	8.8	8.5	11.0
RURAL			
North Westmorland	11.0	10.6	10.8
South Westmorland	10.3	10.0	10.7
WESTMORLAND	10.8	11.0	10.6
ENGLAND and WALES	11.3	11.4	11.3

The Death Rates in this table are calculated using the comparability factor provided for the purpose by the Registrar-General.

The chief causes of death in Westmorland in 1952, 1953, and 1954, in order of maximum fatality in 1954, were as follows :—

	No. of deaths. 1952.	No. of deaths. 1953.	No. of deaths. 1954.
Heart Disease	246	251	301
Cerebral Haemorrhage	100	143	151
Cancer	125	119	119
Other Circulatory Diseases	51	47	37
Violence	32	43	31
Bronchitis	20	34	27
Pneumonia	18	16	19
Digestive Diseases	15	13	11
Other Respiratory Diseases	2	9	10
Nephritis	13	10	8
Tuberculosis of the Respiratory System	8	7	2
Influenza	2	5	2

MATERNITY AND CHILD WELFARE

INFANTILE MORTALITY. (Under 1 year).

Rate per 1,000 Live Births.

District.	1952.	1953.	1954.
URBAN			
Appleby	Nil	47.6	52.6
Kendal	29.7	46.6	16.9
Lakes	19.2	Nil	Nil
Windermere	28.6	14.3	Nil
RURAL			
North Westmorland	22.6	26.4	15.8
South Westmorland	25.4	27.5	33.8
WESTMORLAND	25.3	28.8	19.7
ENGLAND and WALES	27.6	26.8	25.5

ILLEGITIMATE INFANT DEATH RATE.

Rate per 1,000 Illegitimate Live Births.

District.	1952.	1953.	1954.
WESTMORLAND	65.57	90.91	58.8
ENGLAND and WALES	35	33	Not available.

Causes of Death in Infants under 1 year in 1954 :—

Prematurity	8
Atelectasis	2
Cerebral haemorrhage	1
Fractured skull	1
Circulatory failure	1
Hydrocephaly	1
Asphyxia	1
Tuberculosis miliaris	1

CARE OF EXPECTANT AND NURSING MOTHERS AND YOUNG CHILDREN

There has been no Local Health Authority ante-natal clinic in the County since the only one was closed in 1949 owing to the small use made of it. A weekly specialist clinic is held at the County Hospital. Assistance is given in a very few general practitioners' surgeries by midwives; arrangements are made locally by the practitioners and midwives for their mutual convenience. The Local Health Authority has no arrangements for blood testing the expectant mothers and the extent to which practitioners carry this out is not known to me. I am, however, of the opinion that it is not done as a routine measure in every case. There are no special clinics where mothercraft training is undertaken; this of course would be a useful adjunct to any ante-natal clinic. The only mothercraft training which I am aware of is given by the district nurse/midwives in the course of their visits. Maternity outfits are supplied by the Westmorland County Council to expectant mothers and are chiefly distributed via the district nurse.

There are specialist obstetric clinics at the various hospitals serving the area (Cumberland Infirmary, Westmorland County Hospital, Lancaster Royal Infirmary); the Local Health Authority has nothing to do with these clinics. In the case of expectant mothers booking for confinement at the Penrith Maternity Home, midwives employed by the Local Health Authority are, by arrangement with the Hospital Management Committee, responsible for the ante-natal supervision. This facility has been offered to the other Hospitals providing maternity accommodation but has not been accepted.

Notification of discharge of mothers and babies is still not altogether satisfactory, with the exception of Helme Chase Maternity Home and Penrith Maternity Home, where prompt notification is received. In some cases women who have been confined are discovered some time after they have come home from hospital by hearsay information reaching the district nurse. Some improvement in this has been gradually taking place. There is, however, considerable room for further improvement here.

DOMICILIARY MIDWIFERY

The midwifery service is provided directly by the Local Health Authority, who took into employment on the appointed day the staff of the District Nursing Associations which had previously undertaken

this work. There are 37 midwives; the Assistant County Medical Officer has been appointed medical supervisor of midwives and the Superintendent Nursing Officer has been appointed non-medical supervisor. These two officers are responsible for the supervision not only of midwives employed by the Authority but those working in Hospitals and Nursing Homes. There are no midwives engaged in private domiciliary practice. All except two of the midwives employed by the Local Health Authority are qualified to administer gas and air, and are provided with the necessary apparatus, and 25 of them are authorised to use pethidine. Midwives who have booked cases undertake the ante-natal care; where cases have been booked with medical practitioners and are to be confined at home they usually have ante-natal care by their own doctors. In one or two instances the practitioner has found it convenient to have something in the nature of a small private ante-natal clinic to which appropriate midwives who will be present at the confinements in the capacity of maternity nurse are invited to be present. The number of cases booked to be delivered by the midwife alone has seriously declined in Westmorland since the passing of the National Health Service Act. Arrangements have been made for the Local Health Authority to assist in selecting women who are to be confined in the Penrith Maternity Home; however, owing to the decrease in the birth rate there has been no difficulty whatsoever in obtaining beds for those cases wishing to go to maternity homes or hospitals. Local courses of lectures to all district nurse/midwives are arranged annually; in addition midwives are sent on approved refresher courses arranged by the Royal College of Midwives at the expense of the Local Health Authority, during which time they receive full salary.

The Statistical Tables at the end of this Report are a simplified version of the Annual Return to the Ministry.

Domiciliary Confinements

	1952	1953	1954
No. of Cases, doctor booked ...	146	175	168
No. of Cases, doctor not booked ...	121	44	9
	267	219	177

HEALTH VISITING

Apart from two full-time health visitors and one tuberculosis visitor employed in Kendal, health visiting is undertaken by district nurse/midwives, of whom 14 hold the health visitors certificate, the rest being employed under dispensation granted by the Ministry of Health.

To enable unqualified nurses to obtain the health visitors certificate a scholarship is awarded in alternate years under which the cost of training and maintenance is defrayed by the Local Health Authority, the nurse on her part entering into a contract to serve, after qualification, for a minimum of two years. A series of lectures is held locally during each year, and selected nurses are sent in rotation on refresher courses. There is no definite link between the health visitors services, medical practitioners and local hospitals, although some of the younger practitioners in the County are making more use of the health visitors. I do not, however, envisage that any real integration can take place until there are one or more Health Centres.

	1952	1953	1954
Total Health Visits to Infants under 1 year ...	10,433	10,499	10,725
Total Health Visits to Children 1-5 years	13,152	17,046	16,438

HOME NURSING

The Home Nursing Service is provided by the district-nurse/midwife/health visitors employed directly by the Local Health Authority and is under the day-to-day control of the Superintendent Nursing Officer; there is more co-operation with general practitioners in the home nursing field by reason of the fact that although nurses may be called in by patients the nurses are instructed that they must not continue in attendance unless the medical practitioner has also been called in and given directions for the treatment of the case. Contact between the practitioners and the nurses is a direct one and does not come through the Public Health Office. There is very little liaison with hospitals, although occasional requests for dressings or injections are received.

No specific night duty nurses are employed, but all nurses are available day or night in cases of real necessity and no difficulty has been experienced in this direction.

The Council awards one scholarship for District Training per year, and there are no arrangements for district training within this County. An annual series of lectures is arranged which includes topics specifically relating to home nursing.

DIPHTHERIA IMMUNISATION

Immunisation against diphtheria, previously the responsibility of the County Council and District Councils, has, since July, 1948, been the responsibility of the County Council alone. The treatment is given, either by the County Council medical staff or the general practitioners, according as the parents choose, at or before the first birthday, whilst all parents are urged to consent to their children receiving a reinforcing dose on attaining the age of 5 years.

In Kendal, which is the only town of any size in Westmorland, an immunisation clinic is held at monthly intervals throughout the year; booster injections of diphtheria antigen are given at the above-mentioned clinic and also at special clinics arranged from time to time throughout the County, and in other cases following school medical inspection. Arrangements for immunisation against whooping cough are similar to the arrangements for diphtheria immunisation; the age at which immunisation is first done is approximately one year. Private practitioners throughout Westmorland have been encouraged to join in the campaign against diphtheria and whooping cough by taking part in the innoculation of young children. This has become increasingly popular amongst the doctors and has led to some interesting observations.

The success of this scheme may be judged from the fact that for the seventh consecutive year there were no cases of diphtheria notified amongst residents of the County, compared with, for example, 21 notifications and 2 deaths in 1937.

It is generally held that, to provide the required security against diphtheria, about 75 per cent. of the children below the age of 10 years should have been immunised within the last 5 years, and on this basis a fall of 272 in the number of children immunised is disappointing.

The following tables show the detailed statistics in the form in which they are now required by the Ministry of Health.

TABLE A.

Number of children who received a full course of immunisation during the year :—

	Age at Date of Final Injection :							
	Under 1	1	2	3	4	5 to 9	10 to 14	Total.
Primary	350	321	29	11	19	58	5	793
Reinforcing	—	—	—	—	64	512	1	577

TABLE B.

Number of children at 31-12-54 who had completed a course of immunisation prior to that date :—

Age at 31-12-54	Under 1	1-4 years	5-9 years	10-14 years	Total under 15 years.
Born in Year	1954	1953-1950	1949-1945	1944-1940	
Last complete course of injections :					
(a) 1950-54 ...	43	2,468	3,432	945	6,888
(b) 1949 or earlier...	—	—	1,389	3,245	4,634
(c) Est. Child Population ...	890	3,810	10,000		14,700
Immunity Index $\frac{100 \times a}{c}$	4.8%	64.8%	43.8%		47.0%

In addition to the foregoing 76 children, for whom no records have been received, were reported by the Health Visitors to have been immunised by their Family Doctor.

VACCINATION AGAINST SMALLPOX.

With the coming into effect of the National Health Service Act, the Vaccination Acts, 1871-1907, were repealed, the offices of Vaccination Officer and Public Vaccinator were abolished, and it became the duty of the Local Health Authority to make arrangements for the vaccination against smallpox of all persons who need or desire this It is the duty of the Health Visitors to urge all parents to have their children vaccinated as soon as practicable after birth, and all medical practitioners in the County were given an opportunity of carrying out this treatment under the County Council's arrangements. A record of the treatment is usually sent to the County Medical Officer, and fees are payable in respect of each report received.

Lymph is supplied free through the Public Health Laboratory Service, and the Council has also taken power, in its proposals, to make such special arrangements as may be necessary in the event of a threatened epidemic of smallpox.

Details of vaccinations carried out during 1954 are :—

Age at date of vaccination:	Under 1 year.	1 year.	2-4 years.	5-14 years.	15 yrs. and over.	Total.
No. vaccinated ...	552	11	11	13	33	620
No. re-vaccinated	—	—	—	5	54	59
					Total ...	679

Of 863 children born in the County during the year, only 552 had been vaccinated, and whilst this is a very welcome improvement on the three preceding years (65% against 50%, 47% and 31% in 1953, 1952 and 1951 respectively) it cannot be viewed with equanimity in view of the increased risk of the introduction of smallpox infection, by reason of the increased speed and range of foreign travel.

INFANT WELFARE CENTRES

The Local Health Authority provides 18 infant welfare centres, four of which are staffed by a general practitioner, the remainder being attended by Local Health Authority Medical Officers. The clinics range in frequency from once weekly to once per month; Kendal is the only clinic which operates weekly, whilst two others operate fortnightly. The Local Health Authority provides no specialist's clinics; there are however ophthalmic, orthopaedic, paediatric and ear, nose and throat clinics run by the Regional Hospital Board to which mothers and children can have access. The infant welfare clinics are made good use of by the mothers; the chief use is advice on general infant hygiene and feeding. Owing to the scattered nature of the population the clinics tend to be small but one feels that there is a definite need even for a small clinic.

For some years arrangements had been in force under which some Welfare Centres and some District Nurses had issued Welfare Foods supplied under the Government Scheme, but on 28th June, 1955, responsibility for this work was formally transferred to Local Health Authorities. Despite the very short notice given to the County Council of the proposed change it may confidently be stated that in general the population of the county has a service available now which is at least as convenient to them as the service which the Ministry of Food provided.

For the service available in the more remote country areas thanks are due to the many voluntary distributors, W.V.S. members, shopkeepers and others, who give of their time to handle these commodities in places where the demand could not otherwise be met.

The Local Health Authority has also made other dried milks and nutrients available at the Kendal Infant Welfare Centre, which acts as a mother centre to all the other clinics.

Details of Infant Welfare Centres in operation at the end of the year are given below.

Area.	*Centre held at:*	*Frequency of Sessions.*
Ambleside ..	Y.M.C.A. ..	Monthly
Appleby ..	Old First Aid Post ..	Fortnightly
Bampton ..	Memorial Hall ..	Monthly
Bowness-on-W'mere ..	Rayrigg Room ..	„
Brough ..	Oddfellows Hall ..	„
Burneside ..	Bryce Institute ..	„
Calgarth ..	Social Centre ..	„
Kendal ..	School Clinic, Stramongate ..	Weekly
Kirkby Stephen ..	Friends' Meeting House ..	Fortnightly
Milnthorpe ..	Institute Annexe ..	Monthly
Murton ..	Parish Institute ..	„
Shap ..	Methodist Chapel Hall ..	„
Staveley ..	Working Men's Institute ..	„
Tebay ..	Methodist Chapel Hall ..	„
Temple Sowerby ..	Church Hall ..	„
Warcop ..	R.A.C. Camp ..	„
Windermere ..	Y.M.C.A. ..	„
Wickersgill ..	Social Centre ..	„

Once again thanks are due to the local branches of the British Red Cross Society, the St. John Organisation and all other voluntary workers for their assistance in the running of the Centres.

Attendances at Centres

	1952.	1953.	1954.
Under 1 year	3,427	3,127	2,736
Over 1 year	2,956	3,412	3,166
Average per session ...	22.7	22.7	19.4

UNMARRIED MOTHERS AND THEIR CHILDREN.

The Superintendent Nursing Officer is now responsible for investigating and advising these cases, but it should be noted that by no means all unmarried expectant mothers come to her notice; some are dealt with entirely by the Diocesan Moral Welfare Workers, whilst in other cases the girl's family are able, and willing, to make all necessary arrangements for the confinement and subsequent care of the baby.

Births of Illegitimate Children notified	30
Confinements in :—	
Mother's own home	3
St. Monica's Maternity Home	6
Helme Chase Maternity Home	6
Private Nursing Homes	1
Coledale Hall, Carlisle	1
Penrith Maternity Home	3
City Maternity Hospital, Carlisle	5
Brettargh Holt Maternity Home	1
Other addresses	4
Disposal of Infants :—	
Mother keeping baby in own home	24
Baby in care of grandmother	1
Baby died	1
Adopted	2
Mother and baby at home	1
Brantfield Nursery	1

Institutional accommodation for these cases is provided under arrangements made with the undermentioned voluntary homes :—

St. Monica's Maternity Home, Kendal

The Home possesses 20 maternity beds, and during the year 57 maternity cases were admitted, four of whom were domiciled in Westmorland.

Sacred Heart Maternity Home, Brettargh Holt, Kendal

This Home has 40 maternity beds, and during the year 122 maternity cases were admitted, for none of whom the Westmorland County Council were asked to assume financial liability.

In the case of both of the Homes the apparently low number of admissions relative to the number of beds is largely explained by the fact that patients are admitted at least a month before confinement and retained for at least two months afterwards, so as to afford an opportunity for the making of arrangements for the care of the babies.

Care of Premature Infants

The following table gives details of premature infants born to Westmorland mothers during 1954 :—

Born in Hospital			
Still-Births			5
Live Births			42
Died within 24 hours of birth ...	8		
Survived 28 days	32		
Born at Home :			
Still-Births			1
Live Births nursed entirely at home ...			7
Died within 24 hours of birth ...	—		
Survived 28 days	7		
Live Births transferred to hospital			—
Died within 24 hours of birth ...	—		
Survived 28 days	—		
Born in Nursing Homes :			
Still-Births			—
Live Births			1
Died within 24 hours of birth ...	—		
Survived 28 days	1		

REGISTRATION OF NURSING HOMES

(Sections 187 to 194 of the Public Health Act, 1936)

There were 5 registered homes at the end of the year providing beds for 64 maternity patients and 22 other patients. They have been inspected at regular intervals.

DENTAL TREATMENT FOR EXPECTANT AND NURSING MOTHERS AND YOUNG CHILDREN

During the year it has again been found that there is little or no demand for clinic dental treatment by expectant and nursing mothers. One or two attended for conservative treatment and only one denture was supplied

121 children under school age were inspected at Welfare Clinics and 59 were found to require treatment. Only 37 of this number, however, accepted the offer of treatment, but the mothers of the others did say that they would have the necessary treatment done by their own family dentists.

TABLE A.

	Examined.	Requiring Treatment.	Treated.	Made Dentally fit.
Expectant and Nursing Mothers	5	5	5	5
Children under 5 years ..	121	59	37	37

TABLE B.

	Scaling and Gum Treatment.	Fillings.	AgNO3.	Crown Inlay.	Extract.	Gen. Anaes.	Dentures Full.	Dentures Part.	X-ray.
Expectant and Nursing Mothers	3	12	—	—	31	6	1	1	—
Children under 5 years ..	—	28	38	—	23	18	—	—	—

THE PUERPERAL PYREXIA REGULATIONS

During 1954, three cases of Puerperal Pyrexia were notified to the local supervising authority.

DOMESTIC HELP SERVICE

When preparing their proposals under the National Health Service Act the Council, on the advice of the Minister, took advantage of their power under Section 29 of the Act, to provide a Domestic Help Service, available as far as workers can be obtained to the categories of household specified in the Act. Statistical details are shown in Table II on page 76.

The detailed day-to-day administration of this service is carried out by the Superintendent Nursing Officer and her Deputy. The majority of the requests for help are met, although in one or two rural areas difficulty is experienced in recruiting workers, partly due to the fact that only very casual work can be offered. In areas where fairly full time and regular employment can be offered there is much less difficulty in recruitment. The service is at present being used to capacity and its expansion is only prevented by financial stringency. The greatest number of cases helped are old and infirm people, mostly living alone. To maintain the efficient and economical running of the service a considerable amount of visiting of patients receiving help is required for the purpose of adjusting the amount of help given. The service has attracted a good type of woman and many have been in it since it was formed in 1948. It is felt that this service is one of the most vital parts of the National Health Service and that, if it were allowed to expand, it would be a means not only of ensuring the earlier return home of hospital patients but often the avoidance of the removal to homes and hostels of many aged and infirm, though not necessarily ill, people.

MIDWIVES' ACT.

Total number of Midwives practising at the end of the year ...	58
District Nurse Midwives	38

Midwives in Institutions and in Private Practice, 20, viz.:—

(a) Westmorland County Hospital	5
(b) Helme Chase Maternity Home	8
(c) St. Monica's Maternity Home, Kendal ...	4
(d) Brettargh Holt	2
(e) Private Practice :	
Nursing Homes	1

Midwives' Notification Forms received during 1954 were as follows:—

Notification of sending for Medical Aid	69
„ Artificial Feeding	143
„ Stillbirth	9
„ Death	0
„ having laid out a dead body ...	11
„ liability to be a source of infection ...	8

Gas Air Analgesia

The Council's proposals for the provision of a midwifery service, approved by the Minister, require that all midwives shall be trained and equipped for the induction of analgesia, and the stage has now been reached where all midwives, with the exception of two of the older ones, are now trained. Should any newly-appointed midwife be untrained in analgesia, steps are taken to provide a training course at the earliest possible opportunity.

During the year midwives have induced Analgesia in 127 domiciliary cases, and at the end of the year 34 District Nurse Midwives were qualified for the induction of Gas-Air Analgesia

CARE OF BLIND PERSONS

Under the National Assistance Act, 1948, the County Council no longer has the power to give financial assistance to blind persons, but it is required to "make arrangements for promoting the welfare" not only of blind persons but also of the partially-sighted. Administrative responsibility for this work devolves upon the Council's Social Welfare Department, but the County Medical Officer is responsible

for advising the Committee on "all matters relating to health or medical services arising in connection with the Council's functions under the Act . . . . including, in particular, arrangements for the medical examination of applicants for registration as blind persons."

All such applications are referred for examination to one of the specialist ophthalmologists with whom the Council has entered into arrangements for this work. and during 1954 33 such cases were referred, of whom 25 were certified as blind, 6 as partially sighted and 2 as neither blind nor partially sighted.

The total number of persons on the Council's register on 31st December, 1954, was 129 blind and 12 partially-sighted.

The following tables relating to the causes of blindness and treatment obtained for certain conditions is included at the request of the Ministry of Health.

A.—Follow-up of Registered Blind and Partially-Sighted Persons.

	Cause of Disability.			
	Cataract.	Glaucoma.	Retrolental Fibroplasia.	Others.
(i) No. of cases registered during the year in respect of which paragraph (c) of Form B.D.8 recommends:				
(a) No treatment ...	7	—	—	4
(b) Treatment (medical, surgical or optical)	7	3	—	5
(ii) No. of cases at (i) (b) above which on follow-up have received treatment ...	—	3	—	—

B.—Ophthalmia Neonatorum

(i) Total number of cases notified during the year ...	—
(ii) No. of cases in which :	
(a) Vision lost	—
(b) Vision impaired	—
(c) Treatment continuing at end of year ...	—

MENTAL HEALTH

As advised in Ministry of Health Circular 100/47, the Health Committee has appointed a Mental Health Sub-Committee to deal with its functions, under Section 57 of the National Health Service Act, and, so far as they relate to Mental Defectives and Persons of Unsound Mind, under Section 28 of that Act.

The Sub-Committee is constituted as follows :—

Chairman and Vice-Chairman of the Health Committee	2
Members of the Health Committee (being members of the County Council)	10
Members of the Management Committees of Mental Hospitals and Mental Deficiency Institutions ...	4
Others (whether Members of the Health Committee, or the County Council, or neither)	3

On the 5th July, 1948, this Authority took over from the Cumberland, Westmorland and Carlisle Joint Committee for the care of the Mentally Defective the duty of ascertaining what defectives in the area were subject to be dealt with under the Acts, and the duty of providing supervision, care, training and occupation for defectives living in the community. Four officers have been authorised to place persons in a place of safety, under Section 15 of the Mental Deficiency Act, 1913, of whom two have also been authorised to present petitions under the Act. A part-time Occupation Centre Supervisor is also employed.

The County Medical Officer and the Assistant County Medical Officer have each been approved by the Local Health Authority under Section 3 of the Mental Deficiency Act, 1913, for the purposes of giving certificates relating to Mental Defectives. The Authority also employ a Mental Health Worker.

The Authority has undertaken, on behalf of the Regional Hospital Board, the supervision of cases on licence from Institutions who are resident within the area, and also the domiciliary visiting, as and when required, for patients in Institutions and Homes whose parents and friends are resident in Westmorland. The Mental Health Worker does any visiting which may be required on behalf of patients in or discharged from the various Mental Hospitals.

No duties have been delegated to any voluntary organisation, but the authority makes a grant to the National Association for Mental Health, from which organisation help is sought in difficult cases.

The Council's Mental Health Worker is always available to advise and assist in cases of mental illness, and a psychiatric clinic staffed by the Medical Staff of Lancaster Moor Hospital is held at the Westmorland County Hospital, Kendal; the Board has now appointed an additional consultant psychiatrist for the northern part of its area, and this officer has assumed responsibilty for this out-patient work.

The Council's duly authorised officers are available not only for the removal to hospital of certified cases, but also to assist in obtaining admission of "voluntary" and "temporary" cases, and to advise on the best means of dealing with any case of mental illness.

Ascertainment of mental defectives is in general carried out by the County Medical Officer of Health and the Assistant County Medical Officer, and most cases coming to the notice of the Local Health Authority are referred to them by the Local Education Authority.

Occupation Centre

An Occupation Centre was opened in Kendal early in 1949 for one day each week for adult male and female patients. The numbers attending were, as expected in such a sparsely populated area, small, but progress was made in the teaching of rugmaking, embroidery, reading, writing, etc.

Both patients and their relatives are very enthusiastic regarding the progress made, and the latter appreciate being relieved of the responsibility for looking after the patients for a few hours each week. The standard of work in some cases was much higher than had been expected, whilst one of the male patients learned to make simple articles sufficiently well to continue with the work at home and to sell them at a profit.

As a result of the progress so made the Centre has now been opened for a further day per week for young defectives of both sexes.

A simplified version of the Annual Return to the Ministry, given on pages 74 and 75 of this Report, shows the number of cases for which the Council was responsible at the end of the year.

AMBULANCE SERVICE

As in the previous years back to 1948, the Ambulance and Sitting Case Car Service has functioned efficiently. The two services are run separately; the Ambulance Service is under the direct control of the Ambulance Officer who is also the Chief Fire Officer, while the Sitting Case Car Service is run directly by the Health Department. In former years the custom was for the British Red Cross to recruit "Voluntary Car Drivers" and to operate the Sitting Case Car Service on behalf of the Westmorland County Council.

Both the hospitals and General Practitioners have been circularised about the use of the service and both have acted fairly by both service and patient. There have been a few instances where patients have been sent to distant hospitals for treatment which could have been obtained locally. Some economy could be secured if Carlisle Local Health Authority would allow Westmorland County Council to collect patients discharged from Carlisle Hospitals to addresses in Westmorland, as the cost per mile of both ambulances and sitting case cars in Westmorland is very much lower than it is for the Carlisle vehicles. At the moment this County Borough conveys all cases for which it is entitled to charge the Westmorland County Council under section 24 of the National Health Service (Amendment) Act, 1949.

Details of the Sitting Case Car work done during the year, and for comparison figures for the preceding three years are given below:

Year.	No. of Patients.	No. of Journeys.	Total Mileage.
1954	17,204	5,975	246,400
1953	19,154	6,587	275,808
1952	14,579	5,908	216,299
1951	11,534	5,783	219,208

Similar figures for the Ambulances will be found in the following Report of the Chief Ambulance Officer, for which I am indebted to Mr. Haseman.

ANNUAL REPORT OF THE COUNTY AMBULANCE OFFICER

I beg to submit this report on the activities of the County Ambulance Service for the year ended 31st December, 1954.

The number of ambulances in the Service remains at seven and operate from the following depots :—

Depot.	Number of Ambulances.	Method of Manning.
Kendal ..	4 ..	Whole-time (5), augmented by one part-time female attendant and St. John Ambulance Brigade personnel.
Ambleside ..	1 ..	Retained.
Appleby ..	1 ..	Do.
Kirkby Stephen	1 ..	Do.

By agreement with the Cumberland County Council the Penrith ambulance gives cover to certain of our northern parishes.

Ambulances.

I am pleased to report that the whole of the original ambulances taken over, when the responsibility to run an ambulance service became that of the County Council, have now been replaced with more modern and efficient vehicles.

One new Bedford-Lomas ambulance was purchased during the year, replacing the 1935 Austin.

Six of the vehicles in commission are of the Bedford-Lomas type, whilst the seventh is of Morris manufacture and was, as will be remembered, the one purchased from the Ambleside St. John Ambulance Brigade.

The standardisation of the vehicles has helped considerably in the easier maintenance and delivery of spare parts when required.

AMBULANCES NOW IN COMMISSION.

Depot.	Make.	Year.	Mileage at 31st Dec. 1954.	Condition.
Kendal	Bedford (CEC 505)	1954	537	Good
Kendal	Bedford (BEC 672)	1953	32,327	Good
Kendal	Bedford (AEC 905)	1951	79,772	Good
Appleby	Bedford (AEC 539)	1951	51,101	Good
Kendal	Bedford (JM 9344)	1950	77,842	Good
Kirkby Stephen	Bedford (JM 8868)	1949	78,095	Good
Ambleside	Morris (JM 7667)	1948	34,286	Good

The greater part of the work of the Service (by virtue of whole-time men being employed) is carried out from the Kendal depot. Under such circumstances it will be seen that the mileage run by the Kendal ambulances in comparison with the other depots, is much greater over a shorter period. This will mean that eventually mileage and not age will be the deciding factor when future replacements are required.

The Committee's suggestion that an Ambulance Replacement Fund be set up will mean that money for replacement vehicles will be readily available over the period as replacements are required.

The maintenance of the Kendal vehicles continues to be very satisfactorily carried out by the Fire Brigade mechanic.

The servicing and garaging of the vehicles at Kirkby Stephen, Appleby and Ambleside is well done by the respective garages and personnel.

Ambulance Calls.

Station.	No.	Patients Carried : Infectious	Accidents	Maternity	Others.	Total Patients.	Patient Carrying Journeys.	Abortive & Service Journeys.	Total Journeys.	Mileage.
Kendal	4	27	166	103	2,098	2,394	1,823	16	1,839	48,665
Ambleside	1	—	21	4	73	98	83	3	86	3,412
Appleby	1	—	30	26	342	398	204	2	206	14,486
Kirkby Stephen	1	—	22	15	167	204	169	8	177	14,462
	7	27	239	148	2,680	3,094	2,279	29	2,308	81,025
NOTE :—										
1952	7	27	254	141	2,628	3,050	2,140	36	2,176	79,999
1953	7	42	278	167	2,882	3,369	2,378	33	2,411	78,490

	1954.	1953	1952.
Average miles per journey ...	35.11	32.56	36.76
Kendal	26.46	24.41	27.86
Ambleside	39.67	37.15	36.67
Appleby	70.32	65.00	72.43
Kirkby Stephen	81.71	85.64	81.66

Included in the above are 32 journeys, with a mileage of 1,175, which were carried out on behalf of the Lancashire County Council.

Personnel.

At all times both whole-time staff and volunteers have carried out their duties in an exemplary manner. Only with very few exceptions has it been necessary to call upon any volunteer during the daytime at Kendal.

The Kendal Division of the St. John Ambulance Brigade has again given excellent service in providing, when required during the night, an attendant.

The efficency of the whole-time staff has been very noticeable. They have again all qualified in "First Aid to the Injured."

During the year it has been found by experience that the number of removals necessitating the providing of a female attendant has been greatly reduced and, in consequence, the Committee decided that one retained female attendant only should be retained at Kendal.

Accommodation.

The shortage of accommodation for ambulances at Kendal is still apparent. That part of the premises now in use by them is urgently required for fire service purposes.

It may be in the future that consideration should be given to the building of an ambulance garage and administrative centre from which the South of the County could be served.

Wireless.

Our Ambulance Service is one of the very few that operates without wireless-telephony communication. This means of communication with vehicles whilst away from their depot has proved, by those authorities who have it installed, a great saving of time and abortive journeys.

I respectfully suggest that the Committee do further consider the necessity of this means of commnuication.

General.

During the period covered by this report arrangements have been made with the Lancashire Ambulance Service and ourselves that a pool of "Parrot" stretchers is always available. These stretchers are for use when patients are conveyed by rail.

One of these stretchers is now available at the Kendal depot and others are available from Lancashire County Ambulance depots at short notice if required.

Without a keen and efficient staff no Service can function satisfactorily. In this I am very fortunate; the excellent work carried out by all has been very marked, and a service has been given to the Public which they now expect.

In conclusion, I offer my very great thanks to the County Medical Officer and his Staff for the help and advice so readily given. To the Brigade mechanic, Control Room and Clerical Staff who work so diligently, I say thank you.

T. HASEMAN,
Ambulance Officer.

ANNUAL REPORT OF THE COUNTY ANALYST

1.—During the year ended the 31st December, 1954, I have analysed 266 samples of Food and Drugs submitted by the Sampling Officers appointed for the County of Westmorland, under the Food and Drugs Act, 1938 to 1950 and the Defence (Sale of Food) Regulations, 1943.

2.—Samples of genuine quality total 218, which have been certified in this respect; 5 samples were reported as being of genuine quality but below standard, 27 were adulterated or below standard or disclosed some irregularity, 1 was of doubtful quality, whilst 1 reference sample and 14 appeal samples were also the subject of report.

3.—The outcome of the analysis of all samples submitted during 1954, including those samples which were not found to be of genuine quality or as showing some irregularity, is given in the following tables:—

Number of samples other than Milk received for analysis	198
Number of Milk samples received for analysis	68
	266

This indicates that during the year ended the 31st December, 1954, there was an increase of 6 samples received for analysis, as compared with the year ended the 31st December, 1953, when 260 samples were submitted.

Number of samples adulterated or below standard, or showing some irregularity	27
Number of samples of genuine quality but below standard	5
Number of informal samples	6
Number of appeal samples	14
Number of reference samples	1

4. **Milk.**

Of the total number of Milk samples submitted for analysis during the year, 24 were found to be of genuine quality, complying with the requirements of the Sale of Milk Regulations 1939, in all respects, 5 samples were reported as being of genuine quality but below standard, 23 samples were below standard, including 3 samples of Hot Milk, one sample was reported as being of doubtful quality, and in connection with the deficient samples, one sample was taken as a reference sample in course of delivery, and 14 samples were taken as appeal to cow samples.

Of the ordinary samples which were found to be deficient in one respect or another, 10 were below standard in Non-fatty solids, 8 were below standard in Fat including one in which the deficiency in Fat was 25% when judged by the limit of 3% for Fat in Milk set up in the Sale of Milk Regulations 1939, and 2 were deficient both in Non-fatty Solids and in Fat.

The 3 samples of Hot Milk were all deficient in Fat to the extent of 30%, 35% and 66.7% respectively, calculated on the limit of 3% for Fat in Milk; in connection with these samples since the question of the effect of heating Milk upon the Fat content had not been considered before a series of experiments was carried out with Milk in order to find out what would happen under varying conditions and as a result of these investigations the conclusion was that, provided proper precautions were taken to see that the Milk was stirred there was no reason for the Fat content to drop to such low figures as those disclosed by the analyses.

The sample of Milk reported as being of doubtful quality gave analytical figures which could only be described as border line figures together with a border line freezing point; the actual figures found were:—

Non-fatty Solids 8.33%, Fat 3.00%, Freezing Point —.529 degrees Centigrade.

The only reference sample taken was deficient both in Non-fatty Solids and in Fat, but the freezing point showed that the deficiency in Non-fatty Solids was due to some cause other than the addition of water.

Regarding the appeal samples, 9 were of genuine quality, 4 were deficient in Non-fatty solids, and 1 sample was deficient in Fat.

5. **Other Samples**

Samples of articles other than Milk submitted for analysis during the year showed that in all but 3 these samples complied with their descriptions and were of satisfactory quality in every respect, and included in these there were the following submitted for special reasons :—

Baked Beans in Tomato Sauce	...	...	1
Blancmange and Fruit	...	...	1
Dried Skimmed Milk	...	...	2
Biscuits (" Nuttabisko ")	...	...	1

The Baked Beans in Tomato Sauce were found to be in agreement with their description, the samples of Blancmange and Fruit and Skimmed Milk were submitted because of some doubt as to their quality, but there was no ground for any such doubt, and the sample of Biscuits did, undoubtedly, bear a misleading statement on the label in the claim that the article was exceptionally rich in protein content, which was not found to be so in comparison with other well-known Biscuits of similar character.

A sample of Pork Sausages was deficient in meat content to the extent of 6% of the minimum which should have been present, and a sample of Tomato-flavoured Beef Sausages contained Sulphur Dioxide to the extent of 288 parts per million, which is an offence unless there is a declaration of the presence of Preservative at the time of sale.

CYRIL J. H. STOCK,
County Analyst.

FOOD AND DRUGS ACTS, 1938-1950
ANNUAL REPORT OF SAMPLING OFFICER FOR THE YEAR, 1954.

This report covers the period 1st January to 31st December, 1954, with reference to those provisions of the Food and Drugs Acts which relate to the composition and sampling of foods and drugs with a view to securing that such articles are sold only in a pure and genuine condition. It also deals with ancillary duties allied to those parts of the Food and Drugs Acts, for which the County Council is responsible.

The administrative area includes the whole of Westmorland.

Continuing the previous arrangements, particulars of sampling duties undertaken in the Borough of Kendal are extracted quarterly and sent to the Town Clerk.

In the period under review 498 preliminary sorting tests or Gerber tests were made on milk in transit to collecting stations or to consumers' premises, and of 192 formal milk samples obtained it was only found necessary to send 68, together with 198 samples of other foods, for analysis by the Public Analyst.

The number of samples analysed by the Public Analyist was 266, of which 38 or 14.3% were classified as below standard or irregular in some other aspect. If milk samples found to be genuine but below standard might be classed as satisfactory then the figures of 38 and 14.3% would be reduced to 28 and 10.5%.

Milk Samples.

The milk samples analysed by the Public Analyst comprised 47 from retailers of which number 25 were below standard; 5 follow up or reference samples taken in course of delivery of which 3 were below standard; and 16 taken as " Appeal to Cow " samples, of which 7 were below standard.

Of the 35 samples below standard, 10 were classified as genuine but below standard in non-fatty solids, 5 samples disclosed fat deficiencies to the extent of 6.7%, 25%, 30%, 35% and 66% respectively, 1 sample contained 2.4% of added water and the remainder disclosed slight deficiencies either in the fat or non-fatty solid content.

Three of the samples deficient in fat were made the subject of legal proceedings and the action taken in respect of other samples disclosing irregularities was either to warn the sellers or to note the name of the vendor with a view to obtaining further samples.

Samples other than Milk.

The 198 samples "other than milk" were mainly foodstuffs or constituents used in the preparation of food and comprised 190 formal and 8 informal samples from 32 different commodities. Three of the informal samples classified as genuine were obtained from food used or about to be used for school meals. Particular attention has been given to pre-packed and non-pre-packed foods manufactured or prepared for sale or consignment in Westmorland.

Classification of Samples :

Nature.	Satis-factory.	Indicating some irregularity,	Total.
Pre-packed foods	94	1	95
Sausages	31	2	33
Meat Products	18	—	18
Fish Products	6	—	6
Ice Cream	38	—	38
Other non-packed foods ...	—	—	—
Articles of a medicinal nature ...	8	—	8
	195	3	198

Samples disclosing irregularities were :—

Article.	Nature of Irregularity.
Pork Sausage ...	Meat content deficient to the extent of 6%
Tomato Flavoured Beef Sausage	Failure to exhibit "Contains Preservative" notice.
Nuttabisko Biscuits ...	Misleading statement that the article was exceptionally rich in protein content.

The action taken in each case, was to send warning letters to the traders concerned.

The following table gives a summary of the meat content and price of the sausage samples examined during the year. Detailed information under this heading is supplied to the Ministry of Food as one means of assessing the changes which have taken place since the de-control of meat products in March, 1953.

	Based on 16 samples of Pork Sausage.		Based on 18 samples of Beef Sausage.	
	Meat content.	Price per lb.	Meat content.	Price per lb.
		s. d.		s. d.
Maximum ...	100.00%	3 0½	96.00%	2 9
Minimum ...	61.00%	2 4	49.50%	1 8
Average ...	72.90%	2 7½	70.30%	2 2
National average for year ending 31st March, 1954	66.10%	2 8	59.30%	1 11½

Prosecutions.

Persons charged.	Nature of offence.	Result.
1 ...	Hot milk 66.7% deficient in Fat ...	Absolute discharge
1 ...	Hot milk 35% deficient in Fat ...	Absolute discharge
1 ...	Milk 6.7% deficient in Fat ...	Absolute discharge

Ancilliary Duties

Milk Pasteurisation Plants

Under the terms and conditions of the annual licence issued by the County Council, the only milk pasteurisers' plant in the county has been visited at least once a month. Twenty-four samples of pasteurised milk were obtained and submitted for examination by the Department of Pathology. One sample failed to pass the prescribed tests.

School Milk.

Samples of the milk supplied, have been taken at 44 schools and submitted for examination by the Department of Pathology, Public Health Laboratory Services.

It has not been possible to visit each school in the County or to adhere to the original arrangements to obtain 4 samples per year from each of the schools supplied with undesignated milk, but the visits have been so arranged that at least one sample has been taken from milk supplied by all except 2, of the total number of suppliers of milk to schools in the County.

The results of the tests applied are summarised as follows :—

		Tests applied :				
	Samples obtained.	B. Coli.	Methylene Blue.	Phosphatase.	Cavy Inoculated.	Total Tests.
Satisfactory ...	39	41	52	5	66	164
Unsatisfactory ...	27	25	14	—	—	39
Test Void ...	5	—	—	—	—	—
	71	66	66	5	66	203

Of the 25 samples classified as unsatisfactory by reason of the presence of b. coli., 12 were found to be satisfactory on the methylene blue test.

Pharmacy and Poisons Act, 1933

The sellers of poisons listed in Part II of the Poisons List are required to obtain a licence in respect of such poisons and to comply with such provisions of the Act and Poisons Rules as relate to Part II poisons.

Statistical details are given in the table on page 38.

Of 18 infringements noted, 14 were corrected at or shortly after the time of visiting and two of the traders have ceased to sell poisons.

A quarterly examination has been made of the Poisons Registers which are required to be kept by listed sellers of nicotine and its salts, arsenical, mercurial and other poisons.

The Labelling of Food Order, 1953

Pre-packed articles of food, when sold by retail, must, subject to certain exceptions, be marked with a statement of ingredients. The accuracy of such statements is checked on all articles submitted for analysis under the Food and Drugs Act and examinations are made when carrying out the provisions of the Sale of Food (Weights and Measures Act) to ensure that those products which require to be labelled are in fact labelled in a proper manner.

Examinations of 5,532 pre-packed articles of food have been made during the period under review.

One hundred and ten technical infringements have been noted but these were corrected at or shortly after the time of the inspection.

General.

A statistical summary of the records of sampling and allied duties over the past three years is appended hereto.

A. BRYANT,
Chief Sampling Officer.

STATISTICAL SUMMARY OF SAMPLING AND ALLIED DUTIES FOR THE YEARS 1952, 1953 and 1954

	1954		1953		1952	
	Satisfactory.	Doubtful.	Satisfactory.	Doubtful.	Satisfactory.	Doubtful.
Preliminary sorting checks on milk from churns in transit	232	1	376	21	585	3
Office "Gerber" tests on milk—						
from churns in transit	3	4	19	5	8	8
from retailers	136	53	92	20	72	23
supplied to schools	66	3	46	4	55	11
	437	61	533	50	720	45
Number of examinations of milk by Sampling Officer	498		583		765	

Classification of Samples Analysed by Public Analyst.

	1954	1953	1952
Milk.			
Genuine	33	25	18
Genuine, but below standard in non-fatty solids	7	9	7
Doubtful	1	—	3
Below standard in fat	10	5	8
Containing added water	1	1	—
"Appeal to Herd" Satisfactory ..	9	—	—
"Apeal to Herd" Below Standard ..	7	1	—
Total number of milk samples	68	41	36
Other than Milk.			
Informal Genuine	7	13	8
Informal showing some irregularity ..	1	—	2
Formal Genuine	188	199	200
Formal showing some irregularity ..	2	7	8
Total number of "other than milk" samples	198	219	218
Total			
Number of samples classified as satisfactory	228	237	226
Number of samples showing some irregularity	38	23	28
Number of samples submitted for analysis	266	260	254
Number of persons noted for further sampling	14	5	14
Number of warning letters sent to traders ..	5	6	4
Number of prosecutions	3	—	4
Number of prosecutions pending	—	2	—

Milk.

Pasteurising Establishments:			
Satisfactory samples from	23	19	24
Unsatisfactory samples from	1	2	6
Test void	—	2	—
Total samples to Pathological Laboratory	24	23	30

Milk Supplied to Schools.

Satisfactory samples from	39	31	28
Unsatisfactory samples from	27	21	37
Test void	5	4	—
Total samples to Pathological Laboratory	71	56	65

Pharmacy and Poisons Act, 1933.

Number of Listed Sellers of Part II Poisons ..	181	180	184
Number of visits to premise	137	86	66
Number of infringments noted	18	6	4

CANCER TREATMENT

The following details have been supplied by courtesy of the Lancaster and Kendal Hospital Management Committee :—

Number of Clinics held at Kendal during the year ending 31st December, 1954	12
,, new cases seen	72
,, follow-up cases seen	210

The only duty now remaining to the County Council under the Cancer Act concerns the prohibition of advertisements relating to the treatment of cancer and to the sale of articles for use in the treatment thereof. The actual treatment of this condition now forms part of the general hospital and specialist services which it is the duty of the Regional Hospital Boards to provide.

Deaths from Cancer, 1953 and 1954.

	1953.			1954.		
	Males.	Females.	Total.	Males.	Females.	Total.
Urban Districts	25	36	61	29	35	64
Rural Districts	35	23	58	26	29	55
Grand Total ...			119	Grand Total ...		119

TUBERCULOSIS.

In the following table are the figures for the notifications of, and deaths from, Tuberculosis in 1954 :—

Age Periods.	New Cases				Deaths			
	Respiratory.		Non-Respiratory.		Respiratory.		Non-Respiratory.	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1	—	—	—	—	—	—	—	—
1	2	1	—	1	1	—	—	—
5	—	—	—	2	—	—	—	—
15	6	6	1	1	—	—	—	—
25	6	6	2	1	—	—	—	—
35	3	2	—	3	—	—	—	—
45	4	3	1	—	1	1	—	—
55	3	—	1	1	—	—	1	—
65	2	—	1	—	1	—	—	—
75	—	—	—	—	—	—	—	—
TOTAL	26	18	6	9	3	1	1	—
1953	26	15	5	8	5	2	—	2

Note :—In the case of 2 of the 4 deaths recorded in this table, Pulmonary Tuberculosis was not the primary cause of death, and these cases are not, therefore, classified by the Registrar General as being due to this disease.

In 1954 Westmorland patients were admitted to the following Hospitals :—

Westmorland Sanatorium, Meathop	28
High Carley, Ulverston	6
Longtown Infectious Diseases Hospital, Carlisle ...	1
Gateshead Infectious Diseases Hospital	1
Ormside Infectious Diseases Hospital	3
Beaumont Hospital, Lancaster	8
City General Hospital, Carlisle	4
Cumberland Infirmary, Carlisle	2
Blencathra Sanatorium, near Threlkeld	5
Seaham Hall Sanatorium	1
Wrightington Hospital, near Wigan	5
Lancaster Moor Hospital	1
Oswestry Orthopaedic Hospital	1
Royal Infirmary, Lancaster	2

TUBERCULOSIS SCHEME

The Tuberculosis work of the County is now divided between the Manchester and Newcastle-upon-Tyne Regional Hospital Boards, the former being responsible for Kendal Borough, Windermere Urban District, Lakes Urban District and South Westmorland Rural District, whilst the latter is responsible for Appleby Borough and North Westmorland Rural District.

The co-ordination of the prevention and treatment aspects of the tuberculosis problem is secured through the arrangements made by the Local Health Authority under which the Consultant Chest Physicians employed by the Manchester and Newcastle-upon-Tyne Regional Hospital Boards act as the Council's Tuberculosis Officers for the parts of the County falling under their jurisdiction for diagnostic and treatment purposes.

The Chest Physicians give general directions to the work of the Tuberculosis Visitors, and on their recommendation the Authority

provides extra milk to necessitous cases, and open-air shelters where the housing circumstances and the condition of the patient warrants it.

The County Council has also agreed to accept financial responsibility for cases where admission to a rehabilitation colony or village settlement is recommended by the Tuberculosis Officers, and for patients living in and near Kendal an Occupational Therapy Scheme is in operation, under which patients have the advice of an instructor employed by the Local Health Authority and are enabled to purchase materials at concessionary rates.

B.C.G. vaccination is available under arrangements with, and on the advice of, the Chest Physicians.

I have been much interested by the statement in the report of the Ministry of Health for the year 1953, page 8, where the Chief Medical Officer makes the statement that for the fifth year in succession a substantial decline in tuberculosis mortality has to be recorded; deaths in 1953 were only 40% of what they were in 1948. The number of new cases diagnosed also shows a slight decrease.

I find that in Westmorland, the statistics, small as they are, seem to run on parallel lines, thus for the years 1938 to 1944 there was an average number of about 23 deaths per year, with an average of about 50 new cases per year. For 1954, there were 4 deaths but 44 new cases, thus there seems to have been a substantial decline in mortality, whereas the number of new cases has only slightly declined. The actual significance of this is still in some doubt and so far as I can see, only the future will be able to show us what this trend signifies.

The service in the South of the County is under the control of Dr. J. Munro Campbell, Physician Superintendent of Meathop Sanatorium, with whom the Health Department has had a long and happy association, and is centred on the Kendal Chest Clinic. In the North the service is administered by the Special Area Committee for Cumberland and North Westmorland, who have appointed as Consultant Chest Physician Dr. W. Hugh Morton, whose work is centred on the Chest Centre, City General Hospital, Carlisle, and with whom a close association has rapidly developed, to the great benefit of all aspects of the work.

Extracts from the reports of the two Tuberculosis Officers on the work in that part of the county falling within their respective districts are given below.

NORTH WESTMORLAND

Introduction

This report for 1954 records a considerable measure of progress in our campaign against tuberculosis. Not only has there been a most decided decline in the total number of new cases found to have extensive disease, but the number of cases found to be infectious at the end of the year has also declined.

The waiting lists have reached a new low level and, indeed at the time of writing this report (May, 1955) these are practically at zero.

Such results must not cause complacency; while it is highly satisfactory to feel that the number of infectious cases in this community show a steady decline it must not be forgotten that the absence of infection means a larger number of susceptible persons who are not only non-infectious but are completely unprotected.

Pulmonary diseases other than tuberculosis account for the vast majority of cases seen and investigated at the chest centre, and a short section on these is appended as in previous years.

TUBERCULOSIS

Notifications.

In the East Cumberland area in 1954, notifications for the pulmonary type of the disease rose from 140 to 170 and the notifications of non-pulmonary disease dropped from 43 to 34. The increased number of pulmonary notifications undoubtedly reflects not only the high standard of co-operation which exists between the general practitioners and the chest centre but also the increased effort made during the year to discover new cases. Most of the increase in notifications came from the Carlisle City area, the County area only being responsible for an additional three cases.

The notification of new cases of pulmonary tuberculosis is only made when we are satisfied that there is indeed some degree of **active** disease. Many patients, when first seen, present undoubted radiological evidence of old disease and clinical signs confirming this, but, if we are satisfied that the disease is well healed, such cases are not notified although they remain under chest centre supervision for months or even years. I feel that the supervision of such cases is most important as anything likely to lower the patient's general resistance such as an inter-current non-tuberculous inflammatory epi-

sode may easily result in re-activation of the old tuberculous disease, and if such patients are under supervision appropriate treatment for the tuberculosis can be instituted almost immediately. Only then would such a case be notified.

Although notification of a patient as suffering from tuberculosis does not carry the same stigma as it did 15 or 20 years ago some lesser degree still remains. The conscientious patient taking out an insurance policy to cover house purchase may find that the compulsory disclosure of his having been notified as a case of tuberculosis in the past results in his proposal for insurance being turned down by the Insurance Company with relative domestic hardship. Notification therefore remains a serious matter for the patient and should only be carried out when one is satisfied beyond reasonable doubt that **active** disease is present.

The assessment of cases of pulmonary tuberculosis as active is, however, becoming a most difficult problem. As noted later in this report we are becoming increasingly familiar with the patient who, after adequate chemotherapy, presents evidence of cavitation but negative bacteriological findings, and the same problem has arisen in new cases who have had no previous treatment for tuberculosis. Increasing emphasis is therefore being placed on exhaustive radiological investigations and particularly tomography and bronchography in the investigation of apparently inactive cases.

On the other hand, I must stress the importance of notifying cases of active non-pulmonary tuberculosis when these are first seen. Many such cases have undoubtedly not been notified in the past, and, as the vast majority of cases of tuberculosis in this area — both pulmonary and non-pulmonary — are of human origin, this failure to notify active non-pulmonary disease allows a potential pulmonary case to remain undiagnosed and so continue to spread infection. A few instances occurred during the past year; in one case a new case of pulmonary tuberculosis was seen for the first time and close inquiry into the family history elicited the fact that a child of this patient had had tuberculous glands removed three years previously and had not been notified.

The mass radiography unit allotted to the Special Area continues to play a vital role in the discovery of new cases and has been responsible for the finding of no less than 36 of the new cases of pulmonary tuberculosis in the whole of the area covered by the East Cumberland Hospital Management Committee.

Table 1 gives the number of notifications throughout England and Wales for the years 1948 to 1954 :—

TABLE 1.

Notifications in England and Wales

Year.	No. of notifications.
1948	62,600
1949	63,300
1950	59,000
1951	49,440
1952	41,904
1953	40,917
1954	36,973

Table 2 shows the notifications in North Westmorland for 1948 to 1954 :—

TABLE 2.

Year.	Pulmonary.	Non-pulmonary.
1948	17	5
1949	8	6
1950	12	6
1951	9	7
1952	22	4
1953	8	6
1954	6	5

The sex and age distribution of new cases seen during 1954 are set out in Table 3 and apply to the North Westmorland area only, the figures in parentheses being the number of cases from the whole of the East Cumberland Hospital Management Committee area, including the County of Cumberland, City of Carlisle and North Westmorland. I have added these figures in parentheses as the larger figures undoubtedly give a truer picture of the sex and age distribution of the disease as it effects the population in the East Cumberland area. I would particularly draw attention to a new feature of this table for 1954 — i.e. the marked increase in the number of new cases falling in the 5 to 15 age group, particularly in the county area. Whilst in 1953 no new cases of tubercle in this group were found in the Cumberland area, there have been no less than eight cases diagnosed as suffering from tuberculosis in 1954, a most disturbing factor in these days of a welfare state.

TABLE 3.

Respiratory.	Under 5	5-15	15-25	25-35	35-45	45-55	55-65	65 plus.
Males	—(2)	—(7)	2(14)	1(12)	—(10)	—(11)	1(12)	—(7)
Females	—(1)	—(7)	—(26)	—(32)	—(13)	2(12)	—(2)	—(2)
Non-Respiratory.								
Males	—(—)	—(4)	1(3)	1(3)	—(—)	1(2)	—(—)	—(—)
Females	—(2)	1(7)	1(6)	—(3)	—(1)	—(2)	—(2)	—(1)

The figures in this table show that so far as North Westmorland is concerned there has been no obvious alteration in the age or sex distribution of the new cases as compared to 1953. The number of cases where tubercle bacilli have been isolated has remained practically stationary. What is striking, however, is the large proportion of new cases who present definite evidence of tuberculous cavitation when first seen (see Table 4b); this number being appproximately half of the total number of new notified cases.

Although I still feel that the finding of tubercle bacilli in a patient's suptum is most important not only in diagnosis but also in treatment and prognosis, there is no doubt but that we find an increasing number of new patients with definite radiological evidence of tuberculous cavitation but whose sputum does not contain tubercle bacilli. The examination of sputum is interpreted in its widest sense as including laryngeal swab and gastric lavage examination. Such findings strongly suggest that the present classification of cases of pulmonary tuberculosis into R.A. (negative cases) and R.B. (positive cases) is completely out of date and that the only valid distinction to be made should be between those with cavitation and those without cavitation, the examination being based on the results of tomography and bronchography. I feel this distinction is particularly important in that it explains to a large extent our increasing and steady demands on the Thoracic Unit.

The distinction between those with cavitation and those without cavitation had undoubtedly been appreciated by the Ministry as it is embodied in the recent new classification of tuberculosis for mass radiography purposes.

Similar findings are increasingly found in patients who have already had chemotherapy; a cavity still persists radiologically although tubercle bacilli are no longer found on examination. Here the negative bacteriological findings are easily understood, and, to-

gether with the great improvement in the patient's clinical condition, a normal sedimentation rate and the absence of toxaemia, might lull one into accepting the disease as quiescent. Tomography would, however, reveal cavities in many such cases, and these cavities require in turn to be differentiated into those which are undoubtedly tuberculous and a potential danger to the individual concerned and those which are the end result of successful chemotherapy and are no more than a simple cyst.

It will be appreciated therefore that the observation and investigation of apparently healed cases of tuberculosis takes considerable time and may last for many months before a definite diagnosis of active disease is made.

Table 4 (a) gives the pulmonary notifications for 1954 and these are further classified as to whether they are infectious or non-infectious and also the extent of the disease which they have on first examination. The figures given apply to the North Westmorland area whilst the figures in parentheses again refer to the whole of the East Cumberland area.

Respiratory.

TABLE 4 (a)

	R.A.1.	R.A.2.	R.A.3.	R.B.1.	R.B.2.	R.B.3.
Males ..	—(21)	1(20)	—(4)	1(5)	1(9)	1(16)
Females ..	2(39)	—(24)	—(6)	—(3)	—(10)	—(13)
No. of above Respiratory cases referred by M.M.R.						
Males ..	—(10)	—(4)	—(—)	—(1)	1(2)	—(—)
Females ..	1(9)	—(5)	—(1)	—(2)	—(2)	—(—)

Table 4 (b) shows the new cases further classified into those with cavitation on initial examination and those without cavitation.

TABLE 4 (b).

	With cavitation	Without cavitation	Total	Percentage with cavitation
Carlisle City ...	43	55	98	43.88%
East Cumberland ...	32	34	66	48.48%
North Westmorland ...	2	4	6	33.33%
Total ...	77	93	170	45.29%

Deaths.

There are still unfortunately a small number of patients on our Registers who have had extensive and active disease for many years and for whom sanatorium treatment has done little. Even in spite of the undoubted improvement which has resulted in these cases it is surprising considering their gross respiratory crippling how they have managed to survive for such comparatively long periods.

Tables 5 and 6 show respectively the number of deaths from tuberculosis in England and Wales, and for the North Westmorland area for the years 1949 to 1954.

TABLE 5.

Deaths in England and Wales

Year.	Number of deaths.
1949	23,320
1950	18,750
1951	12,031
1952	9,335
1953	7,911
1954	7,069

TABLE 6.

No. of deaths in the North Westmorland area

Year.	Pulmonary.	Non pulmonary.
1949	2	—
1950	5	1
1951	1	1
1952	3	—
1953	2	—
1954	—	—

The number of deaths has dropped to a new low level during 1954 and in the North Westmorland area there were none.

Chest Centre Statistics.

Table 7 gives the number of notified cases of tuberculosis, both pulmonary and non-pulmonary, on the North Westmorland Register for 1954. The figures in parentheses in the grand total relate to the corresponding figures for 1953.

Once again it is pleasing to report a decline in the number of cases who at the end of the year were still infectious—a fall of 5 from 12 to 7.

TABLE 7.

Clinic Register as at the end of 1954

North Westmorland

	Respiratory			Non-Respiratory			Totals			Grand Total
	M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.	
Cases on Clinic Register on 1st January, 1954	28	27	2	6	18	8	34	45	10	89 (80)
Additions to Register during 1954	5	5	1	4	1	1	9	6	2	17 (19)
	33	32	3	10	19	9	43	51	12	106 (99)
Removals from Register during 1954	1	3	—	2	3	—	3	6	—	9 (10)
Number of Cases on Register on 31st December, 1954	33	29	2	9	16	8	42	45	10	97 (89)
Number known to have had a positive sputum within the preceding 6 months	5	2	—	—	—	—	5	2	—	7 (12)

TABLE 8.

STATEMENT OF ATTENDANCES AT CHEST CENTRE, CARLISLE, DURING 1954.

	North Westmorland. Respiratory.	North Westmorland. Non-respiratory.	Total for East Cumberland Area. Respiratory.	Total for East Cumberland Area. Non-respiratory.		Total figures for 1953
1. No. of NEW Cases seen:—						
Adult Male	37	1	728	6		
Adult Female	41	1	850	11		
Male Child	9	—	189	2		
Female Child	9	1	135	6	1927	1487
2. No. of OLD Cases seen:—						
Adult Male	117	11	1724	52		
Adult Female	93	24	1971	122		
Male Child	36	3	489	32		
Female Child	11	8	332	48	4770	4017
3. No. of NEW Contacts seen:—						
Adult Male	8	—	438	—		
Adult Female	16	—	619	—		
Male Child	25	—	466	—		
Female Child	23	—	487	—	2010	1722
4. No. of OLD Contacts seen:—						
Adult Male	—	—	125	—		
Adult Female	2	—	223	—		
Male Child	27	—	687	—		
Female Child	31	—	603	—	1638	992
5. No. of Cases seen by Physiotherapist:—						
Adult Male	5	—	140	—		
Adult Female	6	—	225	—		
Male Child	27	—	382	—		
Female Child	1	—	249	—	996	1056
6. No. of Cases of Pneumoconiosis			45*	—		44
7. No. of A.P. refills given	56		2691	—	2691	3019
8. No. of P.P. refills given	142		4969		4969	4607
9. No. of E.P. refills given	31		427		427	129
10. Screen examinations only	5		455		455	349
11. Aspirations	21		99		99	132
12. Domiciliary visits					366	341
Total attendances					20348	17895

* This figure is already included in No. 1 (Adult Males).

Contact Examinations.

All contacts known to us are examined radiologically, and all children and an increasingly large number of adolescents and adults have been Mantoux tested. We continue to vaccinate with B.C.G. all negative re-actors after a double Mantoux test; not only contacts but members of hospital staffs in the East Cumberland area.

Although much work has been done in this direction there is, I am afraid, a very large loop-hole still remaining and one for which I can offer no ready solution. When a new patient suffering from the disease is first seen it is a comparatively easy matter to get his immediate family contacts along for examination. This often includes brothers or sisters who are themselves married and live in different parts of the county or city as the case may be, but in many cases the patient takes our instructions literally to mean his own immediate family, and although in his mind this may include those who have married, one finds that a married sister is not likely to be included in the list of contacts supplied, presumably because she has changed her name.

There is no doubt but that the tuberculisation state of the population is rapidly changing and that re-orientation of thought and outlook is necessary. Many tuberculin surveys have been recently carried out, e.g. in Ireland, Mid-Wales and in two London Boroughs, as well as to a limited extent in the City of Carlisle, the County of Cumberland, and North Westmorland, the survey here being confined to school children of the 5, 6 and 7 and 13-14 age groups. The striking fact about all these surveys is the startingly low number of children and adolescents found to have a positive Mantoux test. Under 10 years of age the number of children in these surveys found to be Mantoux positive has varied between 5% and 10%, whilst in adolescents between the ages of 15 and 25 only 25% to 30% are Mantoux positive. There is no doubt that this latter age group is an important one in tuberculosis. Young adolescents are far more likely to develop progressive disease at this age, and whilst it is true that the primary infection in school children usually runs a benign course it is a mistake to assume that progressive disease only occurs when they leave school. I have already quoted the figure of eight new East Cumberland school children as having been found to be suffering from active disease during 1954.

As suggested earlier in this report the number of new notifications and the number of deaths in the area do not give sufficient indication of the progress made in our anti-tuberculosis measures.

The changing rate of the incidence of the primary infection in our community does, however, give some indication. At present positive re-actors in the 5 to 7 age groups have, in co-operation with the School Medical Department, been carefully investigated along with their families and whilst no new cases of active tuberculosis have been discovered as a result of these investigations, the time is rapidly approaching when positive Mantoux re-actors in school children of 5 to 7 will undoubtedly have even more significance than it has today. Some writers have even suggested that such children will in future be notified and point to the practice in Norway where only 7% of the school leavers were found to be Mantoux positive in Oslo in 1953.

The extension of B.C.G. vaccination to negative re-actors in the 13 to 14 age groups of school children by the local authority medical staff is warmly welcomed. This measure alone should undoubtedly result in a very considerable decline in the number of new cases of pulmonary tuberculosis amongst adolescents who have just entered industry. I feel, however, that the present rate of progress so far as B.C.G. vaccination goes is much too slow. There is still no protection available for the children below the age of 13 years and none for infants, who are prone to develop the acute miliary types of the disease, unless they are contacts.

The conversion rate after B.C.G. Vaccination remains high; during the year we had no case who failed to convert. I consider the post-B.C.G. Mantoux test most important. Whilst one can assume that practically 100% of our B.C.G. vaccinations will result in conversion from a Mantoux negative state to a Mantoux positive state there is always the possibility that through faulty vaccination conversion may not take place, and, should the child develop an active tuberculous lesion later, omission to do a post-B.C.G. Mantoux test would not only have serious repercussions on the B.C G. scheme but would result in considerable difficulty in diagnosis and assessment

In contacts so vaccinated, frequent attendances for examination at the chest centre are no longer required or desirable and yearly examinations of such children are at present carried out. It is intended also duing the coming year to retest, if possible, all children who were converted five years ago when we first started. It is, however, a very different matter with those children who are Mantoux positive when first seen. The younger the child who is Mantoux positive the closer should be his supervision during the first

year or two, and it is our practice to examine such children at six monthly intervals at least. Children also require closer radiological supervision towards puberty and immediately afterwards.

Institutional Treatment.

Table 10 gives the number of beds available for the treatment of tuberculosis in the area covered by the East Cumberland Hospital Management Committee.

TABLE 10.

Institution	No. of Beds.	
Meathop	12	
Blencathra	48	(temporary allocation)
City General Hospital	15	
Longtown Hospital ...	23	
Cumberland Infirmary ...	10	
Ormside Sanatorium ...	20	
Ward 7, City Gen. Hospital	2	
Ward 8, City Gen. Hospital	2	

Table 11 gives the number of cases from the North Westmorland area admitted to institutions for treatment during 1954.

TABLE 11.

Institution.	Adults.	Children.
Blencathra	5	—
Meathop	2	—
Longtown	4	—
City General Hospital ...	7	1
Cumberland Infirmary ...	3	—
Ormside Sanatorium ...	4	—

We continue to advise complete bed rest with chemotherapy for all patients. Much has been written recently about the good results of ambulant chemotherapy with the patient even at work. Personally I feel that any value in this type of treatment must be confined to cases where a diagnosis of **active** disease is very doubtful, or where the case is a chronic one who has had a recent minimal exacerbation. In such cases I can well appreciate the good pyschological result in allowing a patient to continue at work and yet feel that he is being treated. I very definitely feel, however, that a patient who has active disease and who is ill enough to require chemotherapy is also ill enough to be on complete bed rest.

Treatment by chemotherapy is now firmly established and consists of the administration of streptomycin along with one or other of the other anti-biotics; we prefer isoniazide. In the vast majority of cases no ill effects result from this treatment but occasionally a patient has been found to be unduly sensitive to one or other of the anti-biotics, thus necessitating the substitution of another anti-biotic, or even in a few cases desensitising against the offending anti-biotic. In suitable cases minor collapse measures such as artificial pneumothorax and pneumo-peritoneum are carried out, and we are now in a position to assess the results in cases who underwent collapse therapy in 1951 and 1952. In most of these the collapse therapy has been terminated during the past nine months and in every case the final result has been a good one. Many of the cases in whom a pneumo-peritoneum was induced during these two years have improved so much that major surgery has been possible and has now been carried out again with good results.

Since 1950 at least, all patients with pleural effusion and pleurisy considered to be tuberculous have been treated on orthodox lines with chemotherapy, and although a sufficient length of time has not elapsed to judge of our results it is worth while noting that no such case has developed further tuberculous disease to date. Tuberculous pleurisy may seem to the patient to be a mild and short lived illness but the pleurisy is undoubtedly a gross manifestation of a minor pulmonary lesion, and whilst these latter lesions may not be demonstratable on the radiograph or tomograph, statistics have in the past shown that, of such patients who are not adequately treated, some 30% return later during the five years following the pleurisy with further pulmonary disease. Some statisticians have even given the figure of 25% returning with gross pathology in a period of two years. Chemotherapy given in these cases has averaged three months and paracentesis has been carried out in all cases of effusion for diagnostic purposes and to relieve pressure symptoms. We do not advocate breathing exercises and no degree of respiratory disability has resulted.

The incidence of pulmonary tuberculosis with diabetes in this area merits special mention. During the past year we have treated eight patients suffering from both pulmonary tuberculosis and diabetes; of these four were newly notified during the year. It is estimated that throughout England and Wales there are three diabetics per 1,000 of the population and that of the diabetics about 3% show radiological and clinical evidence of tuberculosis, facts which make it imperative that all diabetics should have regular

periodic chest X-ray examinations. Treatment of both diseases is of necessity to be carried out in hospital or sanatorium, and we have looked upon these cases as emergencies in every sense of the word. Chemotherapy and the application of collapse therapy, including major surgery, has improved the prognosis in these conditions, but the prognosis in the young adolescent is still grave, particularly when, with extensive bilateral pulmonary disease, the diabetic condition necessitates the intake of over 40 units of insulin daily.

I should like to comment on the increase in the number of cases admitted to our wards for treatment of uro-genital lesions. Close co-operation is maintained with the surgical units in the treatment of such cases and our immediate results from chemotherapy have been good. This has been particularly so in disease of the genital tract in the female and follow-up guinea pig tests after treatment have been negative. In renal tuberculosis immediate results are also good and have in suitable cases made it possible for surgical treatment to be carried out. All such cases are closely followed up afterwards as it is fully appreciated that in a certain percentage positive findings recur later necessitating further chemotherapy.

Table 12 shows the waiting lists for the whole of the area covered by the East Cumberland Hospital Management Committee as at the 31st December, 1954, and the waiting list for the whole of the area for admission to one of the Thoracic Units for major surgery.

The comparatively low sanatorium waiting list undoubtedly reflects a considerable measure of success in our fight against tuberculosis and compels us to consider afresh possible further requirements in this area.

At the present moment Blencathra Sanatorium is shared between East and West Cumberland on approximately a 50%-50% basis. With the new developments in West Cumberland and the expected early provision of a 40 bed tuberculosis unit at Whitehaven, it is anticipated that the West Cumberland demands on Blencathra Sanatorium will diminish. We have also at present 12 beds taken up by East Cumberland patients at Meathop Sanatorium, which is outwith the Newcastle Region; these beds are urgently required by the Manchester Regional Hospital Board themselves, and I anticipate that when the West Cumberland demands on Blencathra Sanatorium diminish we shall be able to give up these Meathop beds.

It is probably unwise to forecast further developments beyond this. Both Ormside Sanatorium and Longtown Hospital have long since proved their usefulness; Longtown Hospital having acted as an ancillary unit to the chest ward at the City General Hospital, and Ormside Sanatorium being our most suitable hospital for the admission of non-infectious female cases, both pulmonary and non-pulmonary. Both these small hospitals have excellent tuberculosis beds. Blencathra Sanatorium itself is, I feel, somewhat overcrowded and when circumstances permit I should like to see the space allotted to patients there come into the same category as the beds at Ormside and Longtown. This undoubtedly will mean a reduction in the number of beds at Blencathra Sanatorium.

One urgent necessity is the provision of a new chest ward at the City General Hospital; the present tuberculosis ward is well below standard and will require to be replaced by a new ward with facilities for the investigation of both tuberculous and non-tuberculous chest cases. The provision of a ward unit at this hospital is essential and as far as non-tuberculous cases are concerned our work has been, and is, seriously handicapped.

Facilities at the chest centre, good as they are, have become inadequate to cope with the large numbers of patients now attending at the centre and with their investigations, and the Regional Hospital Board have the matter of further accommodation actively in hand.

Much controversy has recently resulted in the medical press over the future place of the sanatorium in the treatment of cases of tuberculosis. The recent decision to close the Trudeau Sanatorium in the United States started this controversy, and it has gained considerable momentum from the fact that so many sanatoria in this country are situated in most inaccessible areas, thus tending to make the sanatorium a distinctly separate unit from the chest centre besides making it difficult for relatives of patients to visit. There is no doubt that were any sanatoria required today they would have to be built close to the main centres of population in an area. In East Cumberland, however, the chest centre and all our sanatoria and hospital beds are integrated into one single unit with the medical staff at the sanatorium doing regular duty at the chest centre, and vice versa, thus ensuring close collaboration and the maximum benefit to the patients concerned.

The low waiting lists both for admission to sanatoria and the Thoracic Unit are indeed gratifying; not only does the individual patient benefit considerably by early admission but it does allow the chest staff to embark on a definite programme of treatment, aiming, if possible, at complete cure. With the low major surgery waiting list one need no longer temporise in minor surgery and the result is that many patients will be able to resume work at a much earlier date than we could promise previously.

Table 13 shows the number of cases dealt with at Seaham Hall Thoracic Unit during the year 1954. This unit opened in September 1953, and the total number of cases done by the surgical team there from the date of opening until the time of writing — April 1955 — is given in parentheses. The results of major surgery continue to be good, even in border line cases which have been admitted for major surgery as a last resort.

The whole picture of therapy in tuberculosis is changing rapidly and a procedure which might have been advised in an individual case six months ago would today be substituted by another considered as giving better prospects of success. The number of artificial pneumonthorax and pneumoperitoneum inductions has greatly declined, but these are still carried out in selected cases. Whereas in 1953 no less than 55 inductions were done in the chest ward here, this number had dropped to 33 during 1954.

Our demands on the surgical unit have been heavy, but are now likely to remain on a reasonably steady level and may, indeed, diminish. Until now, one of the indications for major surgery has been the presence of a persistent cavity, but pathological and histological examinations of post-operative material has shown that some cavities which were undoubtedly previously tuberculous have become very thick-walled and even lined by firm fibrous tissue as a result of medical therapy and are thus no longer a menace to the patient and his relatives. It is obviously bad treatment to advise surgery where there is no longer any need; one has obviously to assess with reasonable accuracy the state of a cavity before surgery is contemplated. Increasing use is therefore being made of tomography and bronchography, and I can well foresee that some patients may in future be discharged quiescent and able to work even in the presence of radiologically demonstratable cavities.

TABLE 12.

WAITING LISTS.

(Whole of the East Cumberland Chest Area.)

	Males.	Females.	Children.	Total.
(a) For admission to hospital or sanatorium	13	10	3	26
(b) For admission to Thoracic Unit	9	3	—	12

TABLE 13.

	East Cumberland.		Carlisle City.		North Westmorland.	
	M	F.	M.	F.	M.	F.
Thoracoplasty	6 (7)	5 (12)	5 (8)	5 (16)	— (1)	2 (2)
Resection ...	3 (4)	2 (3)	1 (1)	2 (2)	—(—)	1 (1)
Decortication ...	— (—)	— (—)	— (2)	— (1)	—(—)	—(—)
Extra Pleural Pneumothorax	1 (2)	— (—)	1 (2)	1 (2)	—(—)	—(—)
Pneumonectomy	1 (1)	4 (4)	— (1)	— (1)	—(—)	—(—)
Pleurectomy ...	1 (1)	— (—)	— (—)	— (—)	—(—)	—(—)
Lobectomy ...	— (2)	2 (2)	— (—)	— (—)	—(—)	—(—)
	12 (17)	13 (21)	7 (14)	8 (22)	— (1)	3 (3)
	25 (38)		15 (36)		3 (4)	

Care and After-care.

The periodic examination of contacts has been continued during 1954 and much advice is given to patients and their families in co-operation with the local authority staff in preventing the spread of the disease. Patients continue to be admitted within a very short period after being first seen, and on completion of treatment careful supervision is carried out until he or she is ready and fit for work.

Rehabilitation Panels continue to be held every month at the chest centre and considerable time is spent in discussion in getting a fit patient into suitable employment. In this area no patient with a positive sputum is advised to return to work. Re-settlement of patients who have had tuberculosis is not a difficult matter in

this area; as a rule the psychological factor in allowing a patient to return to work is a favourable one, and apart from work involving milk and milk products patients are encouraged to return to their previous employment if their physical disability permits this. In other cases a course of training in a new occupation is instituted in co-operation with the Ministry of Labour, and the occupation chosen is always one where the local Ministry of Labour can promise a local vacancy on completion of training. This is a most important factor as many patients, particularly those with family commitments, could not be peripatetic, or in the present housing shortage risk having to seek work in another part of the country.

Ambulance Service.

Our calls on the ambulance service remain high, largely because we continue to send patients home before their full period of graduated bed rest and exercise have been completed, this enabling us to have a larger turnover in our beds.

Other Chest Diseases.

Bronchiectasis.

The following table shows the number of cases of bronchiectasis on our active register at the end of 1954, the number of new cases coming on our register during the year, and the number of attendances for physiotherapy made by patients suffering from the disease.

	East Cumberland.			Carlisle City.			North Westmorland.		
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
On Register 31-12-53 ...	33	23	28	48	25	15	14	4	5
New cases during 1954 ...	9	5	8	9	10	13	1	—	1
Total on Register 31-12-54 ...	39	32	28	39	27	22	17	3	4
No. of attendances for physiotherapy ...	47	96	212	88	123	391	5	6	28

Full co-operation in their investigation is maintained with the Thoracic Surgeon and in a small number of cases surgical treatment has been carried out at Shotley Bridge Hospital. The results of treatment by physiotherapy continue to be good, and in many cases where this has been done conscientiously patients have improved so much that they no longer have cough or sputum and remain well.

Asthma and Bronchitis.

Full use is again made of the physiotherapy facilities for the large number of children who are seen suffering from asthma and bronchitis. Older patients with chronic bronchitis and emphysema come into a slightly different category; whilst treatment in these cases remains essentially one of controlling the inter-current inflammatory episodes by pencillin or other anti-biotics, some of these cases also appear to be improved as a result of physiotherapy. Patients with asthma particularly appear to respond well as even if there may be emphysema present this would appear to be reversible to some extent in these cases, whereas in chronic bronchitis the accompanying emphysema would appear to be more or less permanent.

Neoplasm.

The number of cases of pulmonary cancer seen and investigated during the year has risen and the whole problem here continues to be a most depressing one. Cases considered suitable for pneumonectomy are admitted to Shotley Bridge Hospital without delay and whilst our surgical colleagues tell us that 40 % of such cases survive for a five-year period this is a very small figure when judging the total number of cases seen. Only two out of the last 14 cases seen at the chest centre have been considered suitable for surgery.

There is no doubt that cancer of the lung is on the increase; whilst during the last 30 years some of this increase may be explained by better diagnosis and greater longevity of the population, figures in the last decade alone show that there has been an increase of about 160%. One striking feature is that this increase in lung cancer has occurred whilst the incidence of common cancer in other sites, such as the stomach and rectum shows no change, or has even declined. It is well worth noting in considering the association of tobacco smoking and cancer that there has been a relative decrease in the incidence of cancer of the larynx.

Pulmonary cancer is much more common in men than in women in a ratio of about 6 to 1 and varies considerably in its malignancy. As a general rule the older the patient is the more likely is the lung cancer to be of the squamous cell type of tumour with a relatively good prognosis so far as years of life are concerned.

The high incidence of lung cancer in the chromate industry has been noted elsewhere and there would also appear to be some increase in the incidence of cancer in iron-ore miners. Our cases here are drawn from all over the East Cumberland area and no increased incidence has been noted in any particular industry.

Controversy still exists as to the etiology of lung cancer. All one can say is that there is undoubtedly present some intrinsic carcinogenic factor and that the trigger mechanism firing it off, as it were, could be any irritant or local trauma.

Pneumoconiosis and Silicosis.

Panels continue to be held at the chest centre in consultation with the Senior Permanent Member of the Pneumoconiosis Board. Most of these cases come from the West Cumberland area, but a few come from the Patterdale Valley in Westmorland and cases from the Alston and Newcastleton areas are also seen. The recent extension of the benefit scheme to workers who have left the industry for some considerable time has resulted in an increase in the number of cases seen. Close collaboration is also maintained with the Pathological Department as not the least interesting or important factor in this work is the study of the post mortem material.

Other Chest Conditions.

During the year an increasing number of cases suffering from sarcoidosis have been investigated and some of these have been admitted for treatment. Confirmation of the diagnosis is usually made by gland biopsy and in certain of the treated cases there has been very considerable improvement.

A considerable number of patients present themselves with acquired diaphragmatic lesions which necessitate extensive radiological investigation and careful assessment as to whether major surgery would be likely to improve their condition.

MASS RADIOGRAPHY.

(Note:—Figures given in brackets throughout the report relate to the corresponding figures for 1953).

The Unit was fully operational throughout the twelve months. Considerably more time was spent in West Cumberland than in previous years and the opportunity was taken to visit many of the smaller townships and villages in the area which had not previously received a visit from the unit. The scheme whereby National Servicemen passed through the Unit terminated in July as it was found impossible to arrange for regular weekly examinations of this group and National Servicemen are now dealt with on the Odelca Unit at the Cumberland Infirmary.

Groups Examined.

During 1954 the Unit operated continuously throughout the Special Area and in addition to carrying out surveys at works and factories, surveys of the general public were carried out on 41 (29) occasions. 2,413 (1,407) contact cases were X-rayed, 1,839 from the East Cumberland area and 574 from West Cumberland. 314 National Service recruits were examined.

Towards the end of the year, by arrangements with the Medical Officers of Health concerned, facilities for X-ray examination were made available for all school children over the age of 13, this examination being complementary to the Mantoux testing and B.C.G. vaccination schemes of the local authorities. Full advantage was taken of the service as 4,329 (4,707) children of these age groups passed through the Unit. It is to be noted that examination of school children is only carried out after receiving the consent of the parents.

The full co-operation of the general practitioners in the areas visited was invited during each survey and the number of persons referred by general practitioners increased from 267 in 1953 to 422 in 1954. The small number of persons so referred is not unexpected as medical practitioners have a very close liaison now with the chest centre, both in East and West Cumberland, and they refer such cases direct to the chest centre.

Sessions were held for members of the general public in 33 (24) towns and villages in the Special Area. Preliminary propaganda was carried out including advertisements in the press, in local cinemas and by posters and handbills. These public sessions necessitated no prior appointment and were well attended, 20,217 (20,090) persons having passed through the unit.

Results.

During the year 44,471 (41,532) persons were examined by the unit. These included 1,124 (1,069) inmates of Dovenby Hall and Garlands Hospitals. Excluding the mental patients, 43,347 (40,463) civilians were examined of whom 20,776 (20,731) were males and 22,571 (19,732) were females.

Number recalled for full-sized X-ray film ... 1,990—4.47% of total examined (1,832—4.41%)

Number referred for clinical examination ... 599—1.35% of total examined (593—1.43%)

Number failing to attend for full-sized film ... 127—6.40% of those recalled (104—5.68%)

The detailed results of the X-ray examinations are shown in Table 1.

TABLE 1.

	Male.	Female.	Total.	Percentage of total examined.
Abnormalities Revealed.				
(i) Non-tuberculous conditions				
1. Abnormalities of ribs, etc.	65	80	145(357)	.33 (.86)
2. Bronchitis and emphysema	105	93	198(978)	.45 (1.59)
3. Bronchiectasis ..	27	34	61 (93)	.14 (.22)
4. Pneumoconiosis ..	134	—	134 (90)	.30 (.22)
5. Pleural thickening ..	149	73	222(379)	.50 (.91)
6. Intrathoracic Neoplasms..	9	3	12 (9)	.03 (.02)
7. Cardiovascular lesions				
(a) congenital ..	1	2	3 (3)	.007 (.007)
(b) acquired ..	124	191	315(335)	.71 (.81)
8. Miscellaneous ..	85	47	132(173)	.30 (.42)
(ii) Suspected pulmonary tuberculosis				
Previously known				
1. Active ..	14	9	32 (13)	.05 (.03)
2. Inactive ..	4	6	10 (17)	.02 (.04)
Newly Discovered				
1. Active ..	52	74	126(121)	.28 (.29)
2. Inactive primary ..	122	144	266(416)	.60 (1.00)
3. Inactive post-primary ..	301	242	543(414)	1.22 (1.00)

The number recalled for clinical examination included all persons presenting radiological evidence of possible active pulmonary tuberculosis, cases of bronchiectasis, particularly those in the under 35 age groups, all neoplasms and many of the persons presenting iron ore and pneumoconiotic changes in the X-ray pictures. Clinical examinations were carried out at the chest centres.

Comments.

The number of persons passing through our unit has increased during 1954. During 1953 a slightly smaller proportion of the unit's time was spent in West Cumberland as the chest centres there were only becoming fully organised; as a result of our findings in 1953 that there appeared to be a greater incidence of tuberculosis in the West Cumberland area, the proportion of time spent in West Cumberland during 1954 was very greatly increased, 139 days being spent there as against 109 days in the East Cumberland area. This increased time in West Cumberland has resulted in a very satisfactory increase in the total number of examinations carried out and it is satisfactory to note that whilst the time in the East Cumberland area has been drastically cut this has not been reflected by a reduction in the number of examinations in this area, the number examined still exceeding those examined in the West Cumberland area. Indeed, an increasing number of groups and individuals in the whole area are coming to look on a mass radiography examination at yearly intervals as a "must," and we are now in the happy position of having difficulty in fitting into the programme certain groups who want to be examined.

During the year the unit took a heavy load off the chest centres by examining a larger number of contacts. 1954 also saw the inception of the B.C.G. scheme in school children by the local authorities and the mass X-ray examination of these children which started towards the end of the year has progressed smoothly in full co-operation with the Medical Officers concerned.

During the year Mr. Ritchie and I have undertaken a series of intensive propaganda campaigns in the East Cumberland area aimed principally at securing a 100% response in the factories we visited.

Unfortunately, in spite of very careful preparation and highly concentrated effort about a week or ten days before the projected survey the results were most disappointing and the percentage response in the factories visited in this way, while showing a slight increase, did not nearly approach the 100% mark. There remains a hard core of workers in each factory who are either afraid to or will not pass through the unit during the survey. Two redeeming features of our campaign were noticed however. On carefully checking our figures we found that in spite of the small increase, a large number of the examinees had never passed through the unit before and we also discovered that a proportion of the employees who failed to attend while the unit was operating at the factory attended later at public sessions. Whilst naturally the total number examined in these factories gave rise to a keen sense of disappointment, the result of closer analysis makes us feel that the policy of carrying out mass radiography surveys in these factories at yearly intervals is fully justified. As the present older age groups retire and younger individuals who have previously passed through the unit whilst at school take their place in industry, we should get eventually a 100% response.

Analysis of persons passing through the unit since it commenced operating in 1951 shows that of the total population of 300,000 in the Special Area, approximately 100,000 have passed through the unit. As very few children under the age of 13 are examined, this means that more than 40% of the adult population have availed themselves of the mass radiography service at some time during the past four years.

Mass radiography continues to be an integral part of the chest service and in examining large numbers of people is the most potent diagnostic agent at our disposal. I would again emphasise, however, that the results of this service cannot be assessed on the number of abnormalities found nor on the number of new cases of active tuberculosis discovered. Important though these figures are it is no less important to be able to give an assurance that so large a proportion of the general public have normal chest X-rays.

Again, even in spite of a normal X-ray report, I must stress that should chest symptoms develop in an individual later, that individual should seek further medical advice from his own doctor. I make no apology for repeating this statement.

Acknowledgments

Once again it is a pleasure to acknowledge the valuable help received in the chest centre work as a whole from the Staff of the County Health Department, and particularly I would express my sincere thanks to Dr. J. A. Guy, the County Medical Officer, for his continued valuable co-operation.

Table 2 gives a detailed analysis of the work of the Unit in the East Cumberland area.

TABLE 2.

EAST CUMBERLAND.

Source of examination.	Miniature Films.	Large Films.	Clinical Exams.	Active T.B.	Inactive T.B.	Bronchiectasis.	Neoplasms.	Pneumoconiosis.	Cardiac Conditions.
Doctors' cases ..	151	33	14	3	9	4	—	—	5
Ante-natal cases	247	9	1	—	1	—	—	—	1
Contact cases ..	1839	64	15	2	36	1	—	—	9
National Service Recruits ..	314	13	1	—	9	—	—	—	—
Scholars ..	2352	39	7	—	10	4	—	—	1
School Staff ..	284	10	—	—	5	—	—	—	—
General Public ..	9209	409	101	19	162	11	6	1	111
Surveys ..	8713	360	82	10	181	16	—	—	60
Mentally defective patients ..	829	69	29	15	25	3	—	—	30
Totals ..	23938	1006	250	49	438	39	6	1	217

W. HUGH MORTON,
Consultant Chest Physician.

SOUTH WESTMORLAND

The Chest Clinic is now at the Ghyll Head Annexe, Westmorland County Hospital, and the sessions have been carried on as before — Friday, 11 a.m. for review and consultation, and on Tuesdays at 4-30 when a refill clinic is held as well as a review.

The following table indicates a comparative picture for the past 5 years, with a general tendency to decreasing figures :—

	1950.	1951.	1952.	1953.	1954.
(1) No. of persons first examined during year ..	369	310	250	296	345
(2) No. of persons in (1) who were contacts	99	95	61	99	97
(3) No. of new cases diagnosed as tuberculous	37	43	22	34	26
(4) No. of cases in (3) who were contacts ..	5	3	5	3	2
(5) No. of cases on Clinic Register at 31st Dec. ..	257	280	286	298	279
(6) No. of cases in (5) who had positive sputum between 1st July and 31st Dec. ..	43	39	37	28	17
(7) Health visitors' visits					
(a) to new cases and contacts ..	554	723	395	185	184
(b) to old cases ..	1452	1869	2021	1665	1706
	2006	2592	2416	1850	1890

The attendances at the Clinic were down appreciably at 1,970, as also were the refills at 721 — this latter largely due to the more common and more frequent use of antibiotics.

One of the few increasing figures is the number of radiographs taken, which this year number 762, whilst screening was carried out on 1,723 patients. Tuberculin tests done at the Clinic numbered 108 and B.C.G. was given to 27 children.

The running of the Clinic and all the Health work in connection with it is efficiently conducted by Mrs. D. Williams, S.R.N.

The No. 5 Unit of the M.M.R. visited South Westmorland area in May, 1954.

Hospitalisation of patients was at Westmorland Sanatorium, Meathop, and Beaumont Hospital, Lancaster, whilst most major surgery cases were dealt with at High Carley.

WESTMORLAND SANATORIUM TABLE.

	1952			1953			1954		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
South Westmorland patients in Meathop at 1st January	10	9	19	8	9	17	7	4	11
Admissions during year ..	11	10	21	13	10	23	14	12	26
Discharges during year ..	13	10	23	14	15	29	14	8	22
South Westmorland patients in Meathop at 31st December	8	9	17	7	4	11	7	8	15

Of the 22 discharges (average stay 193 days) it is noted that practically all had at some time during their stay Streptomycin along with either P.A.S. or I.N.A.H. — no definite course has been laid down in this form of treatment, but the tendency is to give more concentrated courses for such periods as may be considered desirable in individual cases. Pneumoperitoneum and Artificial Pneumothorax have also been continued with in a lessening number of patients, but these treatments, though perhaps selection has tightened, do still hold a definite place in the successful treatment of pulmonary tuberculosis.

The Visiting Consultant Thoracic Surgeon (Mr. J. S. Glennie) comes for discussions every three weeks, and also carries out bronchoscopic examinations when required. Mr. N. C. Scott has carried out the thoracoscopy and phrenic operations.

J. MUNRO CAMPBELL,

Consultant Chest Physician.

No. 5 MASS RADIOGRAPHY UNIT

Report on Surveys carried out in South Westmorland
(Survey Nos. 32 and 34 — 43).

20th April — 6th July, 1954.

This was the Unit's second visit to South Westmorland. The previous survey was in 1950-51 when 7,601 persons were examined as compared with 11,251 during the survey under review. During this latter survey, the Unit operated from 13 different sites, as listed below :—

Somervell Bros. Ltd., Low Mills, Kendal.
Somervell Bros. Ltd., Netherfield, Kendal.
Zion Sunday School, Highgate, Kendal.
Village Hall, Burneside.
Village Hall. Staveley.
St. John's Rooms, Windermere.
Lakes Urban District Council Offices, Ambleside.
Heversham Grammar School, Heversham.
Memorial Hall, Milnthorpe.
Institute, Kirkby Lonsdale.
Oakfield School, Kirkby Lonsdale.
Casterton School, Kirkby Lonsdale.
Queen Elizabeth School, Kirkby Lonsdale.

Open sessions were available to the general public at Kendal, Burneside, Staveley, Windermere, Ambleside, Milnthorpe and Kirkby Lonsdale, and the response was very encouraging. 3,475 members of the general public attended at these centres, which is considered to be most satisfactory in view of the widespread rural community covered. The following table gives the total examined in their age groups :—

Age Groups.	Males.	Females.	Total.
14 years and under	1,171	1,181	2,352
15—24 years	913	1,610	2,523
25—34 years	1,090	984	2,074
35—44 years	899	846	1,745
45—59 years	1,013	1,027	2,040
60 years and over	251	266	517
	5,337	5,914	11,251

These 11,251 examinees can be divided into the following classes :—

	Males.	Females.	Total.
Employees attending Unit in organised parties from firms	2,985	2,192	5,177
General Public	1,004	2,471	3,475
School Children	1,348	1,251	2,599
Totals ...	5,337	5,914	11,251

After the initial miniature films, the following recalls were made :—

	Males.	Females.	Total.
Number recalled for large films	236	256	492
Number recalled for interviews or clinical examinations by Medical Director	28	21	49
Number recalled for screening	1	2	3

Of the 11,251 persons X-rayed, 10,262 were classified as normal. The remaining 989 consisted of persons with tuberculous abnormalities or other abnormal chest conditions.

ACTIVE TUBERCULOSIS

15 persons were found to have Active Tuberculosis, equal to a rate of 1.3 per thousand examined. Of these, 3 demonstrated positive sputums. The table below shows the cases of Active Tuberculosis in their age group together with the rate per thousand for each group :—

	14 years and under.	15-24 years.	25-34 years.	35-44 years.	45-59 years.	60 years and over.	Total.
No. of Male Active cases found ..	1	—	3	1	4	—	9
Rate per thousand examined ..	0.9	—	2.8	1.1	3.9	—	1.7
No. Female Active cases found ..	—	4	2	—	—	—	6
Rate per 1,000 examined ..	—	2.5	2.03	—	—	—	1.01

INACTIVE TUBERCULOSIS

299 persons were classified as having Inactive Tuberculosis, 291 of whom were subsequently regarded as healed and no further action considered necessary. 7 are continuing under observation at the Chest Clinic and 1 removed or was lost sight of.

NON-TUBERCULOUS ABNORMALITIES

Apart from Tuberculosis, abnormal chest conditions were found in 675 instances. The majority of them were not considered to warrant any further action, but some were either referred to the Chest Clinic or to their own doctors. These are listed below :—

Chronic Bronchitis and Emphysema	1
Broncho-pneumonia	1
Consolidation of unknown cause	4
Bronchiectasis	21
Pulmonary Fibrosis	4
Pneumoconiosis	2
Basal Fibrosis	2
Pleural Thickening	4
Intrathoracic new growth	2
Cardio-vascular lesion acquired	23
Miscellaneous :	
Hydated Cyst	1
Giant Cyst (lung)	1
Diaphragmatic Hernia	3
Lipoma	1
Retro-sternal thyroid	2
Aneurysm	1
Abscess of Lung	1
Total ...	74

SCHOOLCHILDREN

Of the 2,599 schoolchildren X-rayed during the survey, 76 were found to have abnormal chest conditions.

One boy had Active Tuberculosis and he received domiciliary treatment.

30 children had Inactive Tuberculosis, but in each case it was subsequently regarded as healed and no further action taken.

The remaining 45 chest abnormalities amongst the schoolchildren were non-tuberculous and in 36 instances no action was taken. 9 children were referred to their own doctor or to the Chest Clinic and these are listed here :—

Consolidation of Unknown Cause	1
Bronchiectasis	6
Broncho-Pneumonia	1
Abscess of Lung	1
Total ...	9

Comments.

This is a very satisfactory survey showing an increase in numbers of some 3,650 over the original survey, these numbers probably being due to more central premises being obtained in Kendal and the increased mobility of the Unit.

I feel that this encouraging response from the general public could be further increased by the distribution of a letter to householders in remote country districts. These could be delivered with the Rate Demands.

The Tuberculosis rate of 1.3 per thousand for this area of rural Westmorland, including the Lake District, may be regarded as significant, showing the necessity for these Rural Surveys.

Another feature of the Survey is the large number of cases of bronchiectasis discovered.

In conclusion, I wish to express my thanks to Dr. J. Munro Campbell, the Consultant Chest Physician, for his assistance, and also to the staff of the Hospital Management Committee.

J. L. CAPPER,

1st July, 1955. Medical Director.

BOVINE TUBERCULOSIS

The Tuberculosis Order, 1938, is carried out by the Divisional Inspector of the Ministry of Agriculture and Fishers, in co-operation with the County Police.

During the period 1st January to 31st December, 1954, 6 animals were slaughtered under the above Order as follows :—

Cows in Milk :—

3 excreting or discharging tuberculous material.
1 suffered from chronic cough.
2 T.B. udders.

Compensation to owners is paid by the Ministry of Agriculture and Fisheries.

MILK SUPPLIES

The Milk and Dairies (Food and Drugs) Act, 1944, remained in abeyance from the date of its enactment until 1st October, 1949, on which date the County Council ceased to be responsible for the licensing of producers of Tuberculin Tested and Accredited Milk.

This Act and the Regulations made thereunder brought about the following position :—

The Minister of Agriculture and Fisheries is now responsible for :—

(i) The registration and supervision of dairy farms.
(ii) The licensing and supervision of producers of Tuberculin Tested and Accredited Milk.

The County Council is responsible for :—

The licensing and supervision of pasteurising and sterilising premises.

The County District Councils are responsible for :—

(i) The registration and supervision of milk distributors and dairies, other than dairy farms.
(ii) The licensing of dealers of designated milk.

The Regulations also laid down detailed requirements in the matters of cleanliness of dairies, milk containers, retail vehicles and milk handlers, as well as methods of sampling and testing milk. The powers of Medical Officers of Health to deal with the problem of milk-borne infectious diseases are also strengthened.

It is further provided that all licences to use the designation "Accredited" shall lapse on 30th September, 1954, and shall not be

renewable; no new licence to use the designation "Tuberculin Tested" will be granted after 30th September, 1954, unless the herd is Attested, and after 30th September, 1957, all "Tuberculin Tested" licences still in force will apply only to attested herds.

A further stage in the campaign to secure a safe milk supply was reached with the enactment of the Milk (Special Designations) Act, 1949, which provides that in areas specified from time to time by the Minister, no milk may be sold by retail unless it carries one of the special designations.

Licences to pasteurise milk have been granted in respect of one establishment in the County, and routine sampling of the treated milk is carried out by the Weights and Measures Department of the Council.

TREATMENT OF VENEREAL DISEASES.

Treatment of Venereal Diseases has now passed to the Regional Hospital Board. The problem of V.D. has never been a large one in Westmorland. The establishment of the Kendal Clinic has had a useful part to play. The journey to Lancaster, Barrow or Carlisle has deterred a number of patients from having regular treatment, with the result that there was an increase in the number of defaulting patients.

Westmorland cases treated at the following Centres for the year ended 31st December, 1954, are as follows :—

New Cases.

Centre.	Syphilis.	Soft Chancre.	Gonorrhoea.	Non-Venereal & undiagnosed conditions.	Total number of cases.
Carlisle ...	—	—	—	4	4
Kendal ...	3	—	2	7	12
Lancaster ...	1	—	1	4	6
	—	—	—	—	—
Total ...	4	—	3	15	22
	—	—	—	—	—

STATISTICAL TABLES.

The following tables are a simplified version of the Annual Returns now required by the Ministry of Health :—

MENTAL DEFICIENCY ACTS, 1913-1938.

Particulars of Cases Reported during the Year 1954.

Ascertainment.

	Males.	Females.	Total.
(a) Cases reported by Local Education Authority :—			
(i) As ineducable	5	1	6
(ii) As needing care and supervision after leaving school	—	—	—
(b) Other cases found 'subject to be dealt with"	—	—	—
(c) Other cases ascertained but not "subject to be dealt with ...	—	—	—
	—	—	—
TOTAL cases reported during the year	5	1	6
	—	—	—

Disposal of cases reported during the Year.

	Males.	Females.	Total.
(a) Ascertained defectives found 'subject to be dealt with" :—			
(i) Admitted to Institutions ...	—	—	—
(ii) Placed under Statutory Supervision	4	1	5
(iii) Died or removed from area	—	—	—
(iv) Taken to "Place of Safety"	1	—	1
(v) Action not yet taken ...	—	—	—
	—	—	—
Total ...	5	1	6
	—	—	—
(b) Cases not at present "subject to be dealt with":—			
Placed under Voluntary Supervision	—	—	—

Particulars of Mental Defectives on 31st December, 1954

	Males.	Females.	Total.
(1) Number of Defectives found "subject to be dealt with":—			
(a) In Institutions—			
Under 16 years of age ...	3	7	10
Aged 16 years and over ...	52	41	93
(b) Under Guardianship—			
Under 16 years of age ...	—	—	—
Aged 16 years and over ...	—	1	1
(c) Under Statutory Supervision—			
Under 16 years of age ...	11	7	18
Aged 16 years and over ...	11	16	27
(d) Taken to "Place of Safety"—			
Under 16 years of age ...	1	—	1
Aged 16 years and over ...	—	—	—
(e) Action not yet taken under (a) to (d) above... ...	—	—	—
	—	—	—
TOTAL number of defectives "subject to be dealt with"	78	72	150
	—	—	—

Included in (b) to (d) above are 3 cases (all male) who are awaiting removal to an Institution.

	Males.	Females.	Total.
(2) Number of Defectives under Voluntary Supervision :—			
Under 16 years of age	—	—	—
Aged 16 years and over... ...	10	20	30
	—	—	—
Total ...	10	20	30
	—	—	—
TOTAL number of defectives (1) and (2) above	88	92	180
Aged 16 years and over ...	25	41	93

TABLE 1.

ANTE-NATAL AND POST-NATAL CLINICS.

(1)	No. of clinics provided (2)	No. of sessions per month (3)	No. of Women who attended. (4)	No. of women in col. 4 who had not attended a clinic since previous confinement. (5)	Total attendances. (6)
Ante-natal ...	—	—	—	—	—
Post-natal ...	—	—	—	—	—

TABLE II.

DOMESTIC HELPS.

(a) Number of Domestic Helps employed at 31st December, 1954 :—	
(1) Whole-time	3
(2) Part-time	33
(b) Number of cases where Help was provided :—	
(1) Maternity	45
(2) Tuberculosis	1
(3) Chronic sick including aged and infirm	133
(4) Others	29

TABLE III.

HOME NURSING.

	Medical.	Surgical.	Infectious Diseases.	Tuber-culosis.	Maternal Compli-cations.	Totals.
No. of cases attended during year ...	3,082	1,172	32	38	34	4,358
No. of visits paid during year ...	58,463	13,820	155	1,310	336	74,084

TABLE IV.

INFANT WELFARE CENTRES.

No. provided	No. of Sessions per month	No. of Children who at first attendance were under 1 yr.	No. of children who attended and who were born in :			Total No. who attended	No. of attendances made by children who at date of attendance were :			Total Attendances.
			1954	1953	1952–49		Under 1 yr.	1-2 years.	2-5 years.	
18	26	366	297	308	510	1,115	2,736	1,289	1,877	5,902

TABLE V.

HEALTH VISITING.

No. of children under 5 yrs. visited.	Expectant mothers		Children under 1 yr. of age.		Children 1–2 yrs.	Children 2–5 yrs.	Tuberculous households	Other cases	Total households visited.	Visits to tuberculous households by T.B. visitors
	First visits.	Total visits.	First visits.	Total visits.	Total visits.	Total visits.	Total visits.	Total visits.		
5,417	—	—	815	10,725	6,790	9,648	981	4,081	4,603	1,663

TABLE VI.

MIDWIVES' ACT, 1951—RETURN OF LOCAL SUPERVISING AUTHORITY.

1. Maternity Cases Attended.

(1)	No. of deliveries in the area attended by Midwives during the period:					
	Domiciliary Cases.					Cases in Institutions.
	Doctor not booked.		Doctor booked.		Totals	
	Doctor present at delivery.	Doctor not present at delivery.	Doctor present at delivery.	Doctor not present at delivery.		
Midwives employed by:						
(a) the Authority ..	3	6	73	95	177	—
(b) Voluntary Organisations	—	—	—	—	—	151
(c) Hospital Management Committees	—	—	—	—	—	506
Midwives in private practice ..	—	—	—	—	—	20
Totals ..	3	6	73	95	177	677

No. of cases delivered in Institutions but attended by domiciliary midwives after discharge therefrom before the fourteenth day 568

No. of domiciliary cases in which the infant was wholly breast fed at fourteenth day 116

2. Midwives in Private Practice.

(a) Domiciliary	—	
(b) In Nursing Homes...	1	
	—	1

3. Medical Aid under Section 14 (1) of the Midwives' Act, 1951.

No. of cases in which medical aid was summoned during the period :—

(a) For Domiciliary cases :—		
(i) Where the Medical Practitioner had arranged to provide Maternity Services under the National Health Service Act, 1946	23	
(ii) Other cases	14	
	—	37
(b) For cases in Institutions		35

4. Administration of Analgesia.

(a) Number of Midwives in practice in the area qualified to administer Analgesics :—		
(i) Domiciliary	34	
(ii) In Institutions	15	
	—	49
(b) Number of sets of Analgesic apparatus in use by the Authority's midwives		31
(c) Number of cases in which gas and air was administered in domiciliary practice:—		
(i) when doctor was not present... ...	72	
(ii) when doctor was present	55	
	—	127
(d) No. of cases in which pethidine was administered in domiciliary practice :—		
(i) when doctor was not present... ...	13	
(ii) when doctor was present	25	
	—	38

TABLE VII.

AMBULANCE SERVICES.

(1)	No. of Vehicles at 31-12-54. (2)	Total No. of patients. (3)	Total No. of journeys. (4)	No. of emergency patients included in col. (3) (5)	Total mileage during period. (6)
Ambulances ...	7	3,369	2,411	278	78,490
Cars	...See below*	19,154	6,587	222	275,808

NOTE :—* The Sitting-case Car Service was provided by voluntary drivers and by taxis.

NOTIFIABLE DISEASES 1954

	Smallpox	Scarlet Fever	Paratyphoid Fever	Erysipelas	Pulmonary Tuberculosis	Other Forms of Tuberculosis	Acute Pneumonia	Acute Poliomyelitis non-Paralytic	Acute Poliomyelitis Paralytic	Acute Polio-Encephalitis	Dysentery	Puerperal Pyrexia	Ophthalmia Neonatorum	Measles	Whooping Cough	Meningococcal Infection	Food Poisoning	Acute Infect. Encephalitis
Appleby ..	—	1	—	—	4	2	—	—	—	—	—	—	—	61	7	1	—	—
Kendal ..	—	3	—	2	14	4	1	4	—	—	2	3	—	5	20	2	—	—
Lakes ..	—	3	—	—	5	—	—	—	—	—	—	—	—	13	—	—	—	—
Windermere	—	—	—	—	5	—	1	—	1	—	—	—	—	218	11	—	—	—
N Westmorland	—	6	—	—	5	3	4	1	—	—	—	—	—	236	22	—	2	—
S Westmorland	—	11	—	—	11	6	1	2	—	—	—	—	—	9	55	2	—	1
Totals 1954	—	24	—	2	44	15	7	7	1	—	2	3	—	542	115	5	2	1
Totals 1953	—	41	—	11	41	13	33	—	6	—	35	5	—	9 42	171	2	11	2

NOTIFIABLE DISEASES (OTHER THAN TUBERCULOSIS) DURING THE YEAR 1954

Ages.	Smallpox.	Scarlet Fever.	Paratyphoid Fever	Erysipelas.	Acute Pneumonia.	Acute Poliomyelitis non-paralytic	AcutePoliomyelitis Paralytic	Acute Polio-Encephalitis	Dysentery	Puerperal Pyrexia.	Ophthalmia Neonatorum.	Measles	Whooping Cough	Meningococcal Infection	Food Poisoning	Acute Infect. Encephalitis
Under 1 year ..	—	—	—	—	—	—	—	—	—	—	—	12	10	2	—	—
1-2 Years	—	2	—	—	1	1	—	—	—	—	—	81	23	1	—	—
3-4 ,, ..	—	4	—	—	—	1	—	—	1	—	—	122	30	1	—	—
5-9 ,, ..	—	13	—	—	—	1	1	—	—	—	—	284	49	—	—	1
10-14 ,, ..	—	3	—	—	—	2	—	—	—	—	—	33	3	—	—	—
15-24 ,, ..	—	1	—	—	3	2	—	—	—	3	—	8	—	—	2	—
25 years and over	—	1	—	2	3	—	—	—	1	—	—	2	—	1	—	—
Age unknown	—	—	—	—	—	—	—	—	—	—	—	--	—	—	—	—
Total Cases notified	—	24	—	2	7	7	1	—	2	3	—	542	115	5	2	1
Cases admitted to Hospital ..	—	6	—	—	1	7	1	—	2	3	—	2	—	3	—	—
Total Deaths ..	—	—	—	—	—	—	—	—	—	—	—	--	—	1	—	—

NOTE: The deaths shown above are only in respect of cases which have been notified.